

**UNITED STATES
AIR FORCE**

OCCUPATIONAL SURVEY REPORT



**COMPUTER, NETWORK, SWITCHING AND CRYPTOGRAPHIC
SYSTEMS**

AFSC 2E2X1

OSSN: 2508

FEBRUARY 2003

**OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION and TRAINING COMMAND
1550 5th STREET EAST
RANDOLPH AFB TEXAS 78150-4449**

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

20030910 061

DISTRIBUTION FOR AFSC 2E2X1 OSR

AFOMS/TEX	1
AFOMS/OAOD	2
CCAF/DFAX	1
DEFENSE TECHNICAL INFORMATION CENTER	2
HQ AFPC/DPAAD3	1
HQ AFPC/DPPAC	1
USMC TRAINING AND EDUCATION, STANDARDS BRANCH	1
HQ AETC/DOO	1
81 TRSS/TSQS	1
HQ ACC/DPPE	3
HQ AETC/DPSEO	3
HQ AFMC/DPEE	3
HQ AFSPC/DPDXE	3
HQ AIA/DPT	3
HQ AMC/DPPET	3
HQ PACAF/DPPET	3
86 MSS/DPMAT	3
ANG/DPDT	3
HQ AFRC/DPTS	5
HQ AFMRDS/CC	4
HQ USAF/ILCXD (ATTN: CMSGT WATLINGTON, 1030 AIR FORCE PENTAGON, WASHINGTON D.C., 20330-1030)	1
338 TRS/TRR (ATTN: MR. HANCOCK, 809 HERCULES, SUITE 139, KEESLER AFB MS, 39534-2032)	2
81 TRB/TGET (825 HERCULES STREET, ROOM 114, KEESLER AFB MS, 39534-2037)	1
HQ ANG/C4IC (ATTN: CMSGT DAIKER, 1411 JEFFERSON DAVIS HWY., STE 6600, ARLINGTON, VA 22202-3231)	1
HQ AFRC/SCFR (CMSGT SHANK, 155 RICHARD RAY BLVD., ROBINS AFB, GA 31098)	1

TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
<u>PREFACE</u>	vii
<u>EXECUTIVE SUMMARY</u>	viii
<u>INTRODUCTION</u>	1
<u>Occupational Analysis Program</u>	1
<u>Survey Development Process</u>	1
<u>Survey Administration</u>	1
<u>Survey Analysis</u>	2
<u>Uses of Survey Data</u>	2
<u>OCCUPATIONAL SURVEY REPORT (OSR) COMPUTER, NETWORK, SWITCHING AND CRYPTOGRAPHIC SYSTEMS (AFSC 2E2X1)</u>	5
<u>Career Ladder Background</u>	5
<u>SURVEY METHODOLOGY</u>	6
<u>Inventory Development</u>	6
<u>2E2X1 Survey Administration</u>	7
<u>Survey Sample</u>	7
<u>2E2X1 JOB STRUCTURE</u>	10
<u>Specialty Jobs</u>	10
<u>Members Not Grouped</u>	13
<u>Comparison of Current Specialty Jobs to Previous Survey</u>	13
<u>SKILL AND EXPERIENCE ANALYSIS</u>	14
Total Sample	
<u>Jobs</u>	14
<u>Duties</u>	14
<u>AD</u>	15
<u>Duties</u>	15
<u>Tasks</u>	15
<u>ANG</u>	15
<u>Duties</u>	15
<u>Tasks</u>	16
<u>AFRC</u>	16
<u>Duties</u>	16
<u>Tasks</u>	16

TABLE OF CONTENTS (Continued)

	<u>PAGE NUMBER</u>
<u>TRAINING ANALYSIS</u>	17
<u>What Entry-Level Members Need To Know</u>	17
<u>First-Enlistment Personnel</u>	17
<u>Task Factor Surveys</u>	19
<u>What Do 2E2X1 Training Documents Reflect?</u>	21
<u>Course Training Standard (CTS) Analysis</u>	21
<u>Plan of Instruction (POI) Analysis</u>	22
<u>JOB SATISFACTION ANALYSIS</u>	23
<u>RETENTION DIMENSIONS</u>	24
<u>Reenlistment</u>	24
<u>Separation</u>	24
<u>TABLE 1</u> MAJCOM REPRESENTATION OF TOTAL SAMPLE	8
<u>TABLE 2</u> PAYGRADE DISTRIBUTION OF SAMPLE	9
<u>TABLE 3</u> SKILL-LEVEL DISTRIBUTION OF SAMPLE	9
<u>TABLE 4</u> COMPONENT CHARACTERISTICS	9
<u>FIGURE 1</u> IDENTIFIED JOB STRUCTURE AND PERCENTAGES OF TOTAL SURVEY SAMPLE (N=1,636).....	12
<u>FIGURE 2</u> DISTRIBUTION OF AFSC 2E2X1 FIRST-ENLISTMENT PERSONNEL ACROSS SPECIALTY JOBS (N=257).....	18
<u>TABLES 5 - 18</u> DESCRIPTIONS OF SPECIALTY JOBS	25
<u>TABLE 19</u> AVERAGE PERCENT TIME SPENT ON DUTIES BY 2E2X1 CLUSTERS AND JOBS	40
<u>TABLE 20</u> SPECIALTY JOB COMPARISON BETWEEN CURRENT AND 1998 SURVEYS.....	43
<u>TABLE 21</u> DISTRIBUTION OF AFSC 2E2X1 SKILL-LEVEL MEMBERS ACROSS CAREER LADDER JOBS (PERCENT IN EACH JOB)	45

TABLE OF CONTENTS (Continued)

	<u>PAGE NUMBER</u>
<u>TABLE 22</u> TIME SPENT ON DUTIES BY MEMBERS OF AFSC 2E2X1 SKILL-LEVEL GROUPS (PERCENT RESPONDING)	46
<u>TABLE 23</u> TIME SPENT ON DUTIES BY AD MEMBERS OF AFSC 2E2X1 SKILL-LEVEL GROUPS (PERCENT RESPONDING)	47
<u>TABLE 24</u> REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E231 PERSONNEL	48
<u>TABLE 25</u> REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E251 PERSONNEL	49
<u>TABLE 26</u> REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E271 PERSONNEL	50
<u>TABLE 27</u> REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E291 PERSONNEL	51
<u>TABLE 28</u> TIME SPENT ON DUTIES BY ANG MEMBERS OF AFSC 2E2X1 SKILL-LEVEL GROUPS (PERCENT RESPONDING)	52
<u>TABLE 29</u> REPRESENTATIVE TASKS PERFORMED BY ANG DAFSC 2E251 PERSONNEL	53
<u>TABLE 30</u> REPRESENTATIVE TASKS PERFORMED BY ANG DAFSC 2E271 PERSONNEL	54
<u>TABLE 31</u> REPRESENTATIVE TASKS PERFORMED BY ANG DAFSC 2E291 PERSONNEL	55
<u>TABLE 32</u> TIME SPENT ON DUTIES BY AFRC MEMBERS OF AFSC 2E2X1 SKILL-LEVEL GROUPS (PERCENT RESPONDING)	56
<u>TABLE 33</u> REPRESENTATIVE TASKS PERFORMED BY AFRC DAFSC 2E251 PERSONNEL	57
<u>TABLE 34</u> REPRESENTATIVE TASKS PERFORMED BY AFRC DAFSC 2E271 PERSONNEL	58
<u>TABLE 35</u> PERCENT TIME SPENT ON DUTIES BY FIRST-ENLISTMENT PERSONNEL (1-48 MONTHS' TAFMS)	59
<u>TABLE 36</u> REPRESENTATIVE TASKS PERFORMED BY AFSC 2E2X1 FIRST- ENLISTMENT PERSONNEL (1-48 MONTHS' TAFMS)	60

TABLE OF CONTENTS (Continued)

	<u>PAGE NUMBER</u>
<u>TABLE 37</u> TEST EQUIPMENT USED OR OPERATED BY 20 PERCENT OR MORE FIRST-ENLISTMENT AFSC 2E2X1 PERSONNEL (PERCENT USING OR OPERATING).....	61
<u>TABLE 38</u> CRYPTOGRAPHIC EQUIPMENT USED OR MAINTAINED BY 20 PERCENT OR MORE FIRST-ENLISTMENT AFSC 2E2X1 PERSONNEL (PERCENT USING OR MAINTAINING).....	61
<u>TABLE 39</u> ANCILLARY EQUIPMENT USED OR MAINTAINED BY 20 PERCENT OR MORE FIRST-ENLISTMENT AFSC 2E2X1 PERSONNEL (PERCENT USING OR MAINTAINING).....	62
<u>TABLE 40</u> AFSC 2E2X1 TASKS WITH HIGHEST TRAINING EMPHASIS RATINGS.....	63
<u>TABLE 41</u> AFSC 2E2X1 TASKS WITH HIGHEST TASK DIFFICULTY RATINGS.....	64
<u>TABLE 42</u> EXAMPLES OF CTS ELEMENTS NOT SUPPORTED BY SURVEY DATA (LESS THAN 20 PERCENT MEMBERS PERFORMING)	65
<u>TABLE 43</u> EXAMPLES OF TASKS NOT REFERENCED TO CTS ELEMENTS WITH 20 PERCENT OR MORE MEMBERS PERFORMING	66
<u>TABLE 44</u> EXAMPLES OF POI OBJECTIVES NOT SUPPORTED BY SURVEY DATA (LESS THAN 30 PERCENT MEMBERS PERFORMING)	67
<u>TABLE 45</u> EXAMPLES OF TASKS NOT REFERENCED TO POI OBJECTIVES WITH 30 PERCENT OR MORE MEMBERS PERFORMING	68
<u>TABLE 46</u> JOB SATISFACTION INDICATORS FOR IDENTIFIED JOB GROUPS (PERCENT MEMBERS RESPONDING)	69
<u>TABLE 47</u> COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 2E2X1 AND COMPARATIVE SAMPLE GROUP (PERCENT MEMBERS RESPONDING)	71
<u>TABLE 48</u> JOB SATISFACTION INDICATORS FOR AD, ANG, AND AFRC MEMBERS (PERCENT MEMBERS RESPONDING)	72
<u>TABLE 49</u> COMPARISON OF REENLISTMENT FACTORS BY TAFMS GROUPS (AVERAGE RESPONSE SCORE)	73
<u>TABLE 50</u> COMPARISON OF SEPARATION FACTORS BY TAFMS GROUPS (AVERAGE RESPONSE SCORE)	74

PREFACE

This report presents the results of an Air Force Occupational Survey of the Computer, Network, Switching and Cryptographic Systems career ladder (AFSC 2E2X1). Authority for conducting an occupational survey is contained in AFI 36-2623. Copies of this report and pertinent computer printouts are distributed to the Air Force Career Field Manager, technical training school, all major using commands, and other interested operations and training officials.

First Lieutenant Chad Anson, Inventory Development Specialist, developed the survey instrument. First Lieutenant Alicia Thompson, Occupational Analyst, analyzed the data and wrote the final report. Ms. Jeanie Guesman provided computer-programming support, and Ms. Dolores Navarro provided administrative support. Major Jose Caussade, Chief, Enlisted Analysis Section, reviewed and approved this report for release.

Additional copies of this report may be obtained by writing to AFOMS/OAOD, 1550 5th Street East, Randolph AFB TX 78150-4449, or by calling DSN 487-5543. For information on the Air Force occupational survey process or other on-going projects, visit our website at <https://www-r.omsq.af.mil/>. (Note: If you experience a Microsoft Word security problem after clicking on the above link, please copy the address window in your web browser.)

EUGENE H. HENRY, Lt Col, USAF
Commander
Air Force Occupational Measurement Squadron

JOHN L. KAMMRATH
Chief, Occupational Analysis
Air Force Occupational Measurement Squadron

**OCCUPATIONAL SURVEY
COMPUTER, NETWORK, SWITCHING AND CRYPTOGRAPHIC SYSTEMS
(AFSC 2E2X1)**

EXECUTIVE SUMMARY

- 1. Survey Coverage:** The Computer, Network, Switching and Cryptographic Systems career ladder was surveyed to obtain current task, software, and equipment data for use in evaluating current training programs. The data will also be used to support Specialty Knowledge Test (SKT) development. Surveys were sent to 1,980 Active Duty (AD), 1,147 Air National Guard (ANG), and 225 Air Force Reserve Command (AFRC) personnel. Survey results were based on 1,636 members responding (1,047 AD, 507 ANG, and 82 AFRC).
- 2. Specialty Jobs:** Structure analysis identified two clusters and ten independent jobs within the specialty. Technical duties, Duty A through Duty E, are widely performed by members of all components and all skill levels. There is still a distinction between the former 2E2X1 personnel and the former 2E3X1 personnel, which is expected after a recent merger of two career fields.
- 3. Career Ladder Progression:** The Computer, Network, Switching and Cryptographic Systems career ladder progression is typical of most career ladders. There was a distinction between 3- and 5-skill-level members, with the 5-skill-level members performing more supervisory work. The distinction between 5- and 7-skill-level members was more obvious, with the 7-skill-level members spending more time performing supervisory/management activities. The 9-skill-level members are spending a greater amount of time performing supervisory/management activities than the 7-skill-level members.
- 4. Training Analysis:** The Course Training Standard (CTS) for the specialty, dated November 2001, was reviewed. The CTS is generally supported by the survey data. A complete review of the CTS has been provided to the technical school for evaluation. The Plan of Instruction (POI) for the 3-skill-level course, dated August 2001, was also reviewed and is generally well supported.
- 5. Job Satisfaction Analysis:** In general, job satisfaction among most 2E2X1 personnel was good. Members of the Computer Switch Maintenance Independent Job and STRATCOM Maintenance Technician Independent Job had relatively low job satisfaction ratings, but both groups are very small.
- 6. Retention Dimensions:** Members in three TAFMS groups (1-48 months' TAFMS, 49-96 months' TAFMS, and 97+ months' TAFMS) agreed on several factors potentially influencing their decision to reenlist or separate. The top factor for reenlistment across all TAFMS groups was job security, while retirement benefits, military lifestyle, pay and allowances, and off-duty education or training opportunities were major influences for two of the three TAFMS groups. The three TAFMS groups were in even more agreement concerning the top factors for separation, which included recognition of efforts and military lifestyle.

INTRODUCTION

Air Force Occupational Measurement Squadron (AFOMS)

Occupational Analysis Program

Simply put, our mission is to provide occupational data for decision makers, allowing them to make informed personnel, training, and education decisions based not on opinion and conjecture, but on empirical, quantitative data.

Survey Development Process

An occupational survey begins with a job inventory (JI) -- a list of all the tasks performed by members of a given Air Force Specialty Code (AFSC) as part of their actual career field work (that is, additional duties and the like are not included). We include every function that career field members perform by working with technical training personnel and operational subject-matter experts (SMEs) to produce a task list that is complete and understandable to the typical job incumbent. The SMEs write each task to the same level of specificity across duty areas, and no task is duplicated in the task list.

In addition to this comprehensive task list, job inventories include a number of background questions that deal with demographic information, job satisfaction, equipment usage, and any other area that our customers, such as Career Field Managers (CFMs) and technical school personnel, may request.

Furthermore, the JI is only one of the surveys that AFOMS produces. The JI task list is used in creating several other surveys that are important for developing and refining career field training programs and for developing career field promotion tests; these surveys and how their results are used will be described shortly.

Survey Administration

The sample of members who receive the JI primarily depends on the size of the career ladder. We typically survey 100% of all eligible members in career ladders numbering 3,000 or fewer assigned members. For career ladders larger than 3,000 members, we select a random sample of half of the eligible members, and for very large career ladders we may sample one-third of all the eligible members. Return rates (the percentage of completed, usable surveys we receive back from the field) generally run between 50% - 70% or greater. All this combines to produce very large and very representative samples in almost every study we conduct, compared to the samples obtained by private commercial surveying and marketing firms, and this in turn leads to highly accurate information about the work and demographics of the career field.

Responding to the JI can be somewhat time-consuming when the number of tasks is large, but it is a simple process. Respondents are asked to examine each task and select each task that they perform in their present job. They are then asked to rate each task they chose on a scale of 1 to 9

(unchosen tasks are given a 0 rating), according to how much relative time they spend performing that task in their present job, compared to all the other tasks in the inventory. These ratings are converted into estimates of actual relative job time spent performing each task.

Survey Analysis

Survey responses are processed using a set of computer programs called the Comprehensive Occupational Data Analysis Programs (CODAP). We are able to calculate some important basic information about each task from the information that respondents provide in the JI: the Percent Members Performing (PMP) and the Percent Time Spent (PTS). CODAP forms groups of survey respondents according to the similarity of their task performance, and our analysts study these groupings to identify distinct jobs. Further, we can provide PMP and PTS information for any subgroup. For example, we can easily determine the percent of E-5s or 3-skill-level or first-term airmen who perform each task, and estimate the average amount of job time they spend performing it. This is important because many of the applications of our data target particular subgroups within the career ladder.

Uses of Survey Data

Survey results are formally reported in an **Occupational Survey Report (OSR)** -- what you are currently reading -- but the OSR is by no means the only product of an occupational survey study. The OSR provides a high-level "snapshot" of an entire AFSC in a compact package, but it is not intended to provide the comprehensive information needed to support important decisions about a career field. That is the purpose of "data extracts," which are comprehensive, detailed sets of CODAP-generated reports designed for particular applications.

The Training Extract -- AFOMS survey data are essential to technical training personnel. The Training Extract provides information about what career ladder incumbents are actually doing in their jobs at each stage of their career, along with supporting information regarding when and how members should be trained to perform their jobs. The data found in the Training Extract regarding first-job, first-term, and 3-skill-level members are the *primary source of empirical information* available to support such decisions.

In addition to the JI, AFOMS produces two other surveys that directly support the training community. Depending on the size of the career ladder, a sample of at least 50 (and frequently 100 or more) 7-skill-level craftsmen is selected to complete a Training Emphasis (TE) survey. A similar-sized sample of other 7-skill-level craftsmen is selected to complete a Task Difficulty (TD) survey.

The TE survey, like the JI, contains the complete career ladder task list, and, like the JI, respondents are asked to rate tasks on a 1 to 9 scale (tasks not rated by the respondent are assigned a "0" rating). Unlike the JI, however, respondents are asked to rate tasks based on how much emphasis they believe should be placed on that task for entry-level structured training. A "1" rating indicates the respondent's belief that very little emphasis be placed on providing structured training on that task. A rating of "9" indicates that it is essential to provide structured

training on the task. Structured training is defined as resident technical schools, field training detachments, mobile training teams, formal on-the-job training (OJT), or any other organized training method. The responses of the entire sample of raters are averaged for each task, and the result is a TE rating for each task.

The TD survey also contains the full task list and requests that respondents rate each task *with which they are familiar* on a scale of 1 to 9 ("1" is low, "9" is high), but this time respondents are asked to rate the amount of time needed to learn to perform that task satisfactorily. In other words, as the name implies, TD is an indicator of how difficult the task is to learn to do. The average TD rating for each task in the inventory is standardized with a mean rating of 5.0 and a standard deviation of 1.0.

When used in conjunction with the PMP and PTS for first-enlistment members, average TE and TD ratings provide insight into the appropriate training requirements for new personnel in the career ladder. These four indices (PMP, PTS, TE, and TD) are used to compute a composite index, the Automated Training Indicator (ATI), for each task. The ATI expresses in a single number between 1 and 18 the likely most appropriate training setting and approach for providing training for that task. ATIs allow training developers quickly to focus attention on those tasks that are most likely to qualify for resident course consideration. Further information concerning TE and TD ratings and ATIs for the entire task list can be found in the Training Extract that accompanies this OSR.

The major users of Training Extract information are attendees at Utilization and Training Workshops (U&TWs). The U&TW is a summit of representative career ladder, training, and classification leaders who evaluate current training efficiency and effectiveness in order to propose and approve changes to Course Training Standard (CTS), particularly with regard to 3-skill-level training, and to address utilization issues. The AFSC's job description in Attachment 6 of AFMAN 36-2108, *Enlisted Classification*, is also reviewed and appropriately revised in light of the survey data to reflect the jobs being performed by the career ladder members.

Part of the process of compiling the Training Extract involves the *CTS matching* process, during which technical school personnel match JI tasks to CTS elements; that is, they tell us what particular task or tasks correspond to each CTS element when it is covered in training. This is especially useful when CTS performance codes are being reviewed for the 3-skill-level course. For example, the U&TW attendees might be asked to consider adding a task performance code to an CTS element that previously has been trained only to a knowledge level. JI, TE, and TD data, combined in the form of the ATI, are important in determining the appropriate proficiency code. Separate Training Extracts are produced for AD and reserve force (ANG and AFRC) component members.

The Specialty Knowledge Test (SKT) Extract -- AFOMS survey data are key to ensuring that SKTs are valid. SKTs are an important part of the Weighted Airman Promotion System (WAPS). Because an airman's test score is frequently the deciding factor in determining who is promoted, SKTs must be valid, fair, and credible.

In terms of SKTs, *valid* means that every question on the test is tied to a task which has been shown to be important to successful performance in the specialty. This tie is crucial to documenting the validity of SKT content.

AFOMS surveys provide test writers with information on the percentage of airmen performing tasks (PMP), an estimate of how much job time they spend performing tasks (PTS), how difficult tasks are to master (TD), and the importance of formal training on tasks (TE). This information is combined to produce a composite index called the Predicted Testing Importance (PTI). Those tasks that are rated highest in PTI are ones that tend to be high in all four of our primary indices -- PMP, PTS, TD, and TE -- exactly the kinds of tasks that one would generally consider job-essential and that should form the basis for test questions. PTI information is used for minor test revisions; how it is used will be explained shortly.

Field-validated testing importance (FVTI) data are produced for major test revisions. Approximately 6 months before the start of test development, a sample of 100 senior career field NCOs is sent a survey containing a list of the 150-200 tasks rated highest in PTI. Respondents are asked to provide a 1-7 rating ("1" is low, "7" is high) of how important they believe it is to include a question concerning that task on the SKT. The responses are averaged for each task, yielding the FVTI index -- a direct measure of the opinions of career field experts as to what constitutes "job-essential" knowledge.

PTI and FVTI information is included in the SKT Extract, which is specifically tailored for use by the SKT teams who come to AFOMS to write the promotion examinations. Two sets of reports are prepared -- one set uses only data for E-5s and the other uses combined data for E-6s and E-7s. Each report gives the SKT team information on every task's PMP, PTS, and PTI, and, for major test revisions, FVTI data. Occupational survey data are thus the only objective source of information available to the team regarding how to make the test they write meet legal requirements for validity and fairness.

The Analysis Extract -- The Analysis Extract is an archive of all the data collected in the course of a study that are not incorporated into one of the other extracts. We typically produce separate Analysis Extracts for AD and ANG/AFRC members. The Analysis Extract is usually an enormous document, a compilation of the many reports that "slice and dice" the data in virtually every potentially useful way. Just about any question anyone has regarding career ladder work, personnel, or training and utilization issues can be answered by consulting one or another of the reports in the Analysis Extract.

The Occupational Survey Report -- This document, the OSR, captures survey data and analysis both in breadth and depth. For ease of reading, the first half of the OSR concentrates on breadth with compelling factors and implications across the specialty. Tables following the narrative show depth with regard to these factors and implications. Where appropriate, highlights of the tables are contained in the body.

OCCUPATIONAL SURVEY REPORT (OSR)
COMPUTER, NETWORK, SWITCHING AND CRYPTOGRAPHIC SYSTEMS
(AFSC 2E2X1)

This is a report of an occupational survey of the Computer, Network, Switching and Cryptographic Systems career ladder, conducted by the Occupational Analysis Flight, AFOMS. The OSR reports the findings of current data that are available for use in guiding the development and evaluation of training and support planned changes within this career ladder. In addition, the data are used to support SKT development. Effective 31 October 2000, the 2E2X1 (Electronic Computer and Switching Systems) and 2E3X1 (Secure Communications Systems) career fields merged into one with the new title of Computer, Network, Switching and Cryptographic Systems (AFSC 2E2X1). This is the first study of the new career field.

Career Ladder Background

According to the Specialty Description in AFMAN 36-2108, *Enlisted Classification*, dated 31 October 2002, Computer, Network, Switching and Cryptographic Systems personnel sustain network infrastructure, cryptographic equipment, and deployable switching systems in fixed and deployed environments. They also sustain and operate systems through effective troubleshooting, repair, diagnostics, and system performance analysis.

The initial technical training school for this AFSC is located at Keesler AFB MS. Following the prerequisite 48-day Common Electronic Principles course (E3AQR2E231-481) at Keesler AFB, members attend the E3ABR2E231 002, Computer, Network, Switching and Cryptographic Systems Apprentice course, which is 75 academic days and provides graduates with the knowledge and skills for the following principles and activities:

- Teaches data communications, general computer maintenance repairs, network concepts, operating systems/applications software, telephone switching systems, information transport devices, IDNX, ATM, and multiplexers. Hands-on training is provided on computer repair, operational checks, fault isolation, etc., using a sophisticated computer system as training vehicle.

Entry into AFSC 2E2X1 requires an Armed Forces Vocational Aptitude Battery (ASVAB) "Electronic" score of 67 and a Strength requirement of "J" (weight lift of 60 lb). Normal color vision as defined in AFI 48-123, *Medical Examination and Standards*, is required. Personnel must be qualified to operate a government vehicle according to AFI 24-301, *Vehicle Operations*. For award and retention in this AFSC, personnel must be eligible for a Secret security clearance according to AFI 31-501, *Personnel Security Management Program*.

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) Occupational Survey Study Number (OSSN) 2508, dated February 2002. During the development of the comprehensive task list, 59 subject-matter experts from nine operational bases and one training unit were interviewed. The resulting JI contains a comprehensive listing of 1,357 tasks grouped under 25 duty headings and a background section. This background section requests such information as base of assignment, command of assignment, and standard background questions, including job title, reenlistment/separation factors, deployments and TDYs, work schedule, and functional area. Additional background items concerned maintenance level assigned, prior AFSC (if appropriate), courses completed, Air Defense and Warning Systems configuration items maintained, Strategic Communications (STRATCOM) configuration items maintained, tactical or mobile systems configuration items maintained, Air Force Satellite Control Network (AFSCN) configuration items maintained, computer operating systems used or operated, computer system processors maintained, computer system peripherals maintained, test equipment used or operated, cryptographic equipment used or maintained and ancillary equipment used or maintained. (The complete survey is available on the CD containing the products from this study.)

<u>BASE</u>	<u>REASON FOR VISIT</u>
Keesler AFB MS	Technical Training School
Shaw AFB SC	Supports Command and Control and flying operations
Tinker AFB OK	Supports deployable communications, computer systems, navigational aids, and air traffic control services
Offutt AFB NE	Focus on STRATCOM tasks
Peterson AFB CO	Supports 21 st Space Wing
Buckley AFB CO	Defense Support Program (DSP) and Space-Based Infrared System (SBIRS)
F.E. Warren AFB WY	Strategic missile unit
Indian Springs AF Aux NV	Predator System
Langley AFB VA	Ensures readiness for worldwide war-fighting missions
Lackland AFB TX	Primarily in support of the Basic Electronic Principles Course

2E2X1 Survey Administration

From February to May 2002, the survey control monitor at the technical training school and operational bases administered the inventory to all eligible DAFSC 2E231, 2E251, 2E271, and 2E291 AD, ANG, and AFRC personnel. Members ineligible to take the survey included the following: (1) hospitalized members; (2) members in transition for a permanent change of station; (3) members retiring within the time the inventories were administered to the field; and (4) members who had been in their present jobs for less than 6 weeks. Participants were selected from a computer-generated mailing list obtained from data tapes maintained by the Air Force Personnel Center, Randolph AFB TX.

Survey Sample

The data on survey returns were examined to ensure that the final sample reflected an accurate representation across major commands (MAJCOMs), paygrades, and skill levels. Table 1 shows the distribution of the survey sample by MAJCOM, while Table 2 displays the survey distribution by paygrade groups. Table 3 shows the final sample distribution by skill level. Table 4 displays the component characteristics for the AD, ANG, and AFRC members in the final sample.

TABLE 1

MAJCOM REPRESENTATION OF TOTAL SAMPLE		
COMMAND	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
ACC	21	23
USAFE	5	5
PACAF	5	5
AMC	4	4
AETC	4	5
AIA	6	8
AFMC	3	2
AFSPC	4	5
OTHER**	7	7
ANG	33	31
AFRC	8	5
TOTAL ASSIGNED*		4,084
TOTAL ELIGIBLE		3,389
TOTAL SURVEYS MAILED		3,352
TOTAL IN SAMPLE		1,636
PERCENT OF ASSIGNED IN SAMPLE		40
PERCENT OF ELIGIBLE IN SAMPLE		48
PERCENT OF MAILED IN SAMPLE		49

* As of Feb 02

** Highest percentages in "Other" include Air Force Elements Europe, Air Force Elements Defense Information Systems Agency, Air Force Elements United States Atlantic Command Air Force Elements (other), and Air Force Pentagon Communications Agency

TABLE 2

PAYGRADE DISTRIBUTION OF SAMPLE		
PAYGRADE	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
E-1 - E-3	7	3
E-4	22	21
E-5	30	32
E-6	24	24
E-7	15	17
E-8	2	2

SKILL-LEVEL DISTRIBUTION OF SAMPLE		
SKILL LEVEL	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
2E231	10	8
2E251	50	51
2E271	39	38
2E291	*	2

Columns may
not add up to 100
due to rounding

TABLE 3

* Indicates less than 1%

Columns may not add up to 100 due to rounding

TABLE 4

COMPONENT CHARACTERISTICS			
	AD	ANG	AFRC
ASSIGNED	2,417	1,343	324
SURVEYED	1,980	1,147	225
SAMPLE	1,055	499	82
% OF SURVEYED	53	44	36

The Command, Paygrade, Skill-Level distributions and component characteristics of the survey sample are close to the percent assigned, indicating that the sample is a true representation of the career ladder population assigned to the MAJCOMs.

2E2X1 JOB STRUCTURE

The first step in the analysis process is to identify the career ladder structure in terms of the jobs performed by the respondents. CODAP creates an individual job description for each respondent based on the tasks performed and relative amount of time spent on these tasks. The CODAP automated job clustering program then compares all the individual job descriptions, locates the two descriptions with the most similar tasks and time spent ratings, and combines them to form a composite job description. In successive stages, CODAP either adds new members to this initial group or forms new groups based on the similarity of tasks and time spent ratings. Human analysis of the final output, aided by additional measures of similarities and differences between groups, determines the final job structure of the career field as described here.

The basic group used in the hierarchical clustering process is the Job. When two or more jobs have a substantial degree of similarity in tasks performed and time spent on tasks, they are grouped together and identified as a Cluster. Jobs not falling within any cluster are identified as Independent Jobs (IJs). The structure of the career ladder is then defined in terms of clusters, jobs, and independent jobs. The job structure resulting from this grouping process (the various jobs within the AFSC) can be used to evaluate the changes that have occurred in the AFSC since the previous OSR. It can also be used to guide future changes in the AFSC. The above terminology will be used in the discussion of the 2E2X1 career ladder.

Specialty Jobs

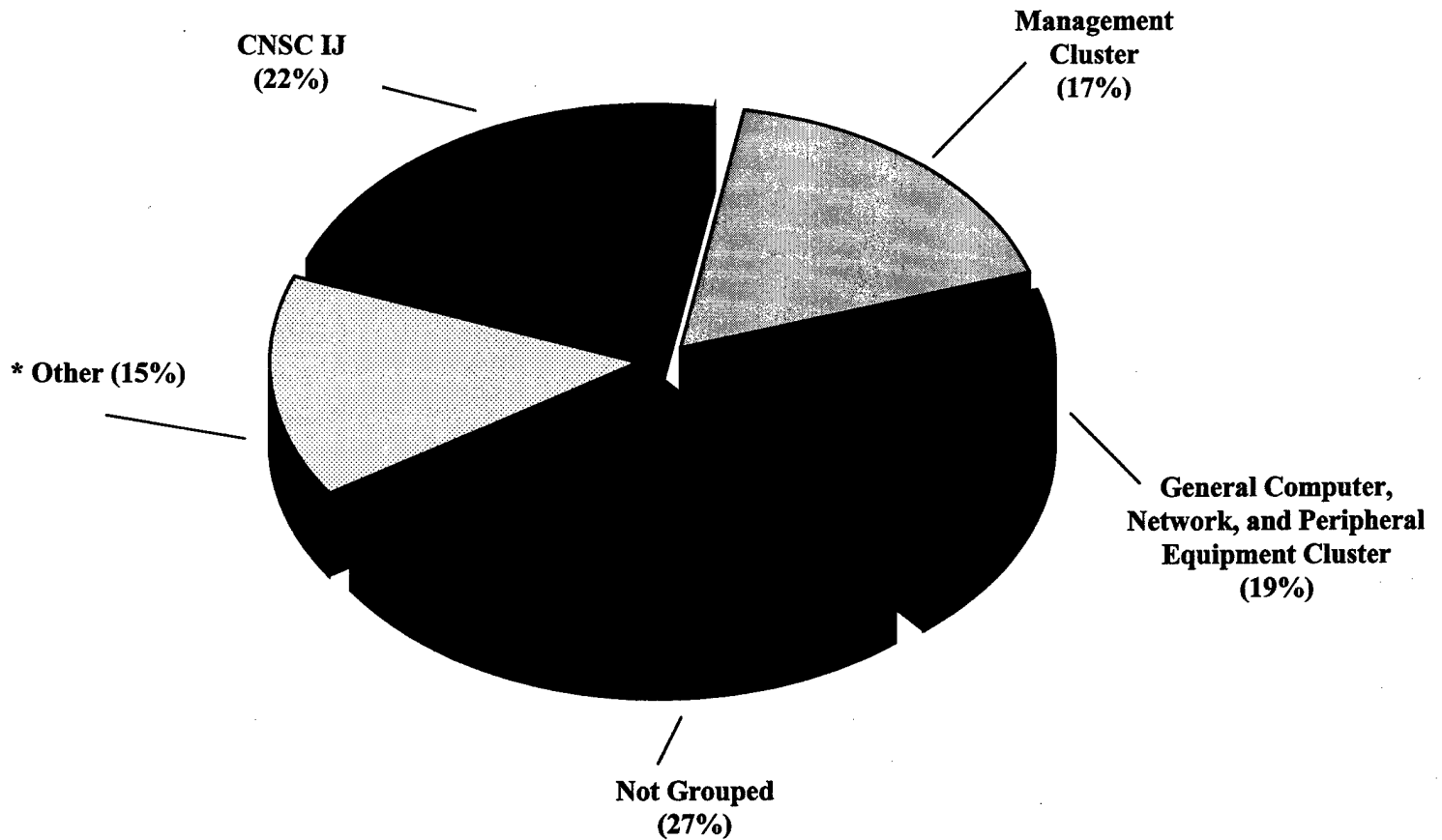
Based on the analysis of tasks performed and the amount of time spent performing each task, two clusters and ten independent jobs were identified within the Computer, Network, Switching and Cryptographic Systems career ladder. Figure 1 shows this job structure. A written outline of the job structure follows. The stage (STG) number shown beside each title refers to computer-generated tracking information of no importance to the reader. The letter "N" represents the number of members in each group. Tables 5-18 (at the end of this report, following the narrative) provide detailed descriptions of the clusters and jobs listed below, including demographic information and representative tasks that members perform. In addition, the tables show some distinguishing tasks performed by members of jobs identified within clusters.

- I. MANAGEMENT CLUSTER (STG 69, N=270)
 - A. TRAINING JOB (STG 300, N=17)
 - B. QUALITY ASSURANCE JOB (STG 336, N=10)
 - C. MAINTENANCE SUPPORT JOB (STG 385, N=18)
 - D. NCOIC JOB (STG 458, N=132)
- II. GENERAL COMPUTER, NETWORK, AND PERIPHERAL EQUIPMENT CLUSTER (STG 109, N=319)
 - A. SMALL COMPUTER MAINTENANCE TECHNICIAN JOB (STG 240, N=273)
 - B. INFRASTRUCTURE TECHNICIAN JOB (STG 277, N=27)

- III. JOINT SURVEILLANCE SYSTEM (JSS) IJ (STG 243, N=48)
- IV. COMPUTER SWITCH MAINTENANCE IJ (STG 309, N=16)
- V. AIRCRAFT COMPUTER MAINTAINER IJ (STG 402, N=30)
- VI. INTEL ENGINEERING AND INSTALLATION (E&I) IJ (STG 474, N=13)
- VII. TACTICAL COMM TECHNICIAN IJ (STG 445, N=19)
- VIII. TACTICAL SWITCH MAINTENANCE IJ (STG 348, N=10)
- IX. COMPUTER, NETWORK, SWITCHING AND CRYPTOGRAPHIC (CNSC) IJ (STG 338, N=365)
- X. STRATCOM MAINTENANCE TECHNICIAN IJ (STG 412, N=18)
- XI. CRYPTO MAINTENANCE TECHNICIAN IJ (STG 249, N=58)
- XII. SECURE TELEPHONE SWITCH TECHNICIAN IJ (STG 387, N=10)

Table 19, at the end of this narrative, displays time spent on duties by the members within these clusters and jobs.

**IDENTIFIED JOB STRUCTURE AND PERCENTAGES OF
TOTAL SURVEY SAMPLE
(N=1,636)**



***Other includes:**

- Joint Surveillance System (JSS) IJ (3%)
- Computer Switch Maintenance IJ (1%)
- Aircraft Computer Maintainer IJ (2%)
- Intel E&I IJ (1%)
- Tactical Comm Technician IJ (1%)
- Tactical Switch Maintenance IJ (1%)
- STRATCOM Maintenance Technician IJ (1%)
- Crypto Maintenance Technician IJ (4%)
- Secure Telephone Switch Technician IJ (1%)

FIGURE 1

Members Not Grouped

- Remaining 27% of survey sample did not group with any cluster or independent job
 - Survey respondents sometimes do not fall into an identified job because they perform fewer tasks or mark the same tasks but give considerably different time spent ratings for those tasks
 - In addition, there may not have been enough individuals performing the same combination of tasks to warrant identification of a job
 - Members not grouped into any cluster or job were holding a variety of jobs, such as Intel Support, CCI Maintenance, Satellite Systems Technician, and Network Integrator
 - Important point to note is that all major AFSC functions are covered in identified clusters and independent jobs

Comparison of Current Specialty Jobs to Previous Survey

The results of the specialty job analysis were compared to the last two OSRs, Electronic Computer and Switching Systems (formerly 2E2X1) and Secure Communications Systems (formerly 2E3X1) dated July 1998 and October 1998, respectively. Some of the previously identified jobs did not match some of the jobs of the current survey. These jobs from the former 2E2X1 AFSC include Headquarters Staff NCO II, Combat Communications NCOIC Job within the Combat Communications Cluster, and the General Troubleshooting Job within the General Computer and Switching Maintenance Cluster. Jobs from the former 2E3X1 AFSC that did not match the current study were Safety/Security Management II, Mobile/Tactical Management Job within the Management/Staff Cluster and the COMSEC Control Job, the Depot Maintenance Job, the Red Switch Technician Job, and the Line Supervision Job within the Cryptographic and Telecommunications Cluster.

- Overall nature of the 2E2X1 career ladder has not changed much since the previous studies; still a very heterogeneous career ladder with small pockets of members performing jobs that are more focused

Table 20 shows the clusters and jobs identified in this study compared to the previous studies conducted in 1998.

SKILL AND EXPERIENCE ANALYSIS

An analysis of DAFSC groups in conjunction with the analysis of the career ladder structure is an important part of each OSR. This information may be used to evaluate how well career ladder documents, such as AFMAN 36-2108, *Enlisted Classification*, reflect what career ladder personnel are actually doing in the field.

TOTAL SAMPLE

Jobs

Table 21 – Distribution of skill-level members across career ladder clusters and jobs:

- General Computer, Network, and Peripheral Equipment Cluster and CNSC Independent Job appear as two of the top three jobs across 3-, 5-, and 7-skill levels
- Relatively high proportion of 3-skill-level members identified in Crypto Maintenance Technician Independent Job when compared to 5-, 7-, and 9-skill-level members
- Most of 3-skill-level members and 5-skill-level members in General Computer, Network, and Peripheral Equipment Cluster
- Majority of DAFSC 2E271 members in CNSC Independent Job and Management Cluster
- Overwhelming majority of 9-skill-level members identified in the Management Cluster

Duties

Table 22 – Time spent on duties by members of skill-level groups:

- Members at 3-, 5-, and 7-skill levels spend majority of their time performing tasks in Duty A (Performing General Computer, Network, Switching, and Cryptographic Maintenance Activities)
- Members at 3-, 5-, and 7-skill levels spend majority of their time across technical Duty Areas A through E, with the exceptions of 5-skill-level members beginning to spend time in Duty Y (Performing Management and Supervisory Activities) and 7-skill-level members spending 19% of their time on Duty Y tasks
- 9-skill-level members spend the majority of their time performing tasks in Duty Y (Performing Management and Supervisory Activities)

AD

Duties

Table 23 – Time spent on duties by AD members of skill-level groups:

- Similar to the total sample, AD members at 3- and 5-skill levels spend their time across the technical Duty Areas A through E. AD 5-skill-level members also spend some time in Duty Y (Performing Management and Supervisory Activities)
- 7- and 9-skill-level members spend a significant amount of their time in Duty Y (Performing Management and Supervisory Activities)

Tasks

Table 24 – Tasks performed by AD 2E231 members:

- Tasks being performed by highest percentages of 3-skill-level members (63% and below) indicate that career ladder members are performing tasks such as inspecting batteries and inventorying and removing and replacing equipment

Table 25 – Tasks performed by AD 2E251 members:

- Tasks being performed by highest percentages of 5-skill-level members are very similar to tasks being performed by 3-skill-level members, but the 5-skill-level members start picking up general training tasks in Duty X and some supervisory tasks in Duty Y

Table 26 – Tasks performed by AD 2E271 members:

- Heavy emphasis on supervisory and managerial activities at this skill level

Table 27 – Tasks performed by AD 2E291 members:

- Performing tasks such as writing, developing, and evaluating -- tasks one would expect to see at this skill level
- Perform lowest average number of tasks for all skill levels across all components

ANG

Duties

Table 28 – Time spent on duties by ANG members of skill-level groups:

- Like AD 5-skill levels, ANG 5- and 7-skill-level members spend most of their time on tasks in technical Duty Areas A through E, with the majority falling in Duty A (Performing General Computer, Network, Switching, and Cryptographic Maintenance Activities) and Duty B (Performing General Alignment, Fault Isolation, and Preventive Maintenance Inspection (PMI)) Activities

Tasks

Table 29 – Tasks performed by ANG 2E251 members

Table 30 – Tasks performed by ANG 2E271 members:

- Average 208 tasks, which is the highest average number of tasks among every skill level in every component

Table 31 – Tasks performed by ANG 2E291 members

AFRC

Duties

Table 32 – Time spent on duties by AFRC members of skill-level groups:

- AFRC members at both skill levels spend more of their time performing tasks in Duty A (Performing General Computer, Network, Switching, and Cryptographic Maintenance Activities)
- AFRC 5-skill-level members spend significantly more time Maintaining Computers, Network, and Peripheral Equipment (Duty E) than AFRC 7-skill-level members and AD and ANG 5-skill-level members

Tasks

Table 33 – Tasks performed by AFRC 2E251 members

Table 34 – Tasks performed by AFRC 2E271 members:

- Emergence of tasks in Duty X (Performing Training Activities) and Duty W (Performing Mobility and Contingency Activities) when compared to AFRC 5-skill-level members

TRAINING ANALYSIS

Occupational survey data are a source of information that can assist in the development or evaluation of training programs for both entry-level and advanced members. In particular, the factors used to evaluate entry-level member training include the jobs that are being performed by first-enlistment personnel (1-48 months' TAFMS), the overall distribution of first-enlistment personnel across career ladder jobs, the percent of first-enlistment members who perform specific tasks, and ratings of relative training emphasis (TE) and task difficulty (TD). (TE and TD ratings are discussed in the Task Factor Administration section of this OSR.)

WHAT ENTRY-LEVEL MEMBERS NEED TO KNOW

First-Enlistment Personnel (1-48 months' TAFMS)

N=257 (16% of sample)

Jobs

Figure 2 – Distribution of first-enlistment personnel across specialty clusters and jobs:

- Increase of 5% in Crypto Maintenance Technician Independent Job and decrease of 10% in the CNSC Independent Job when compared to the total sample (Figure 1)

Duties

Table 35 – Relative time spent on duties

Tasks

Table 36 – Representative tasks performed

Equipment

Table 37 – Test equipment used or operated:

- Multimeters and digital voltmeters are used or operated most among first-enlistment personnel

Table 38 – Cryptographic equipment used or maintained:

- KG-84 series cryptographic equipment used or maintained most

Table 39 – Ancillary equipment used or maintained:

- High percentage of first-enlistment personnel using or maintaining STU III telephones

**DISTRIBUTION OF AFSC 2E2X1 FIRST-ENLISTMENT
PERSONNEL ACROSS SPECIALTY JOBS
(N=257)**

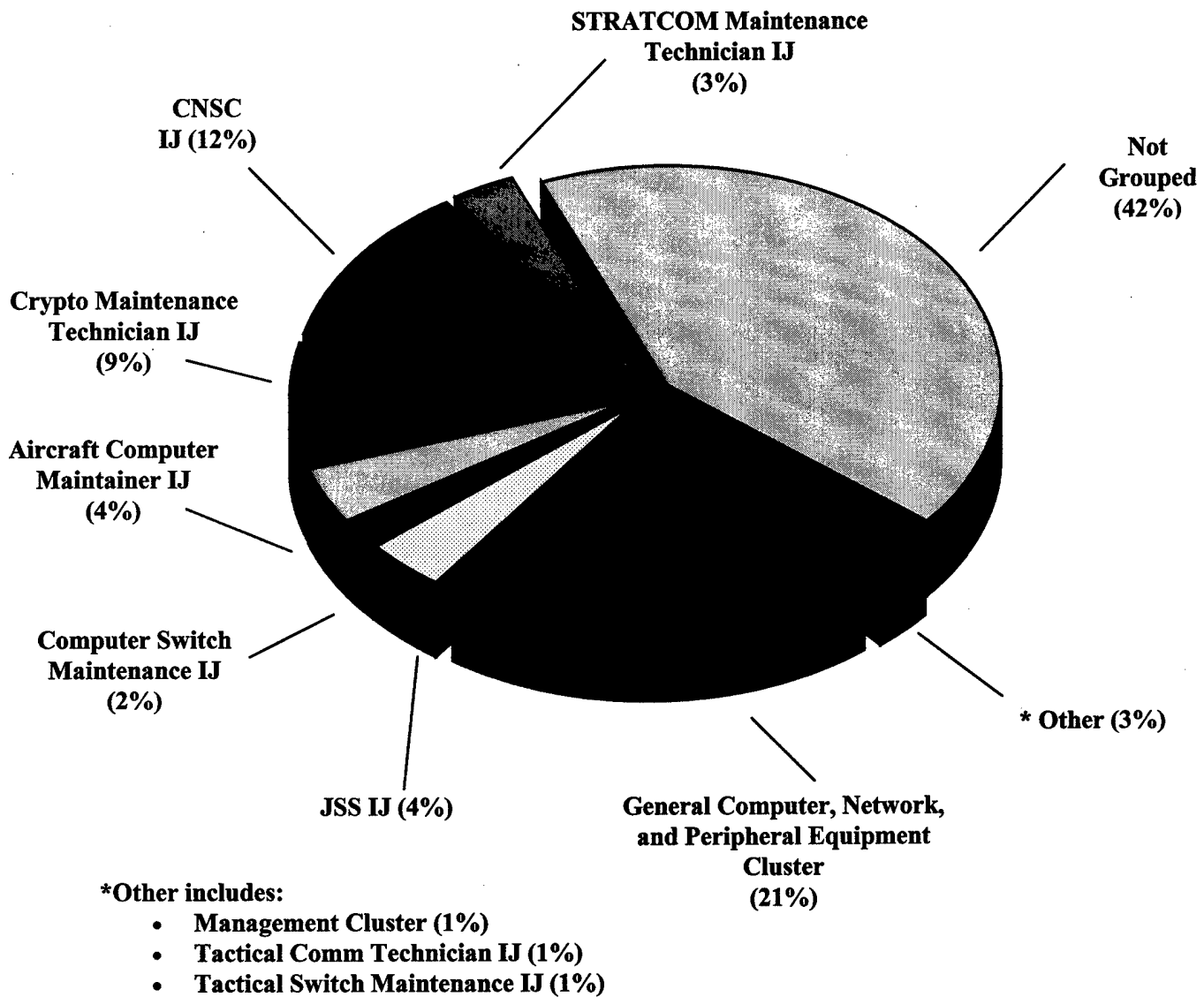


FIGURE 2

TASK FACTOR SURVEYS

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information, along with data from the Course Training Standard (CTS) and Plan of Instruction (POI), is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected DAFSC 2E2X1 members (generally E-6 or E-7 craftsmen) completed either a training emphasis (TE) or task difficulty (TD) survey. These training documents (CTS and POI) were reviewed by matching survey tasks to CTS and POI elements, then examining task performance, TE, and TD data for the matched tasks.

Task Factor Administration

TE and TD data can help training development personnel decide which tasks to emphasize for entry-level, structured training (resident technical schools, field training detachments, mobile training teams, formal OJT, or any other organized training method). For example, tasks receiving high TE and TD ratings generally warrant resident training if they are also performed by a moderate-to-high percentage of first-enlistment members. Tasks receiving high TE and/or TD ratings but being performed by relatively low percentages of first-enlistment members may be more appropriately planned for structured OJT programs within the career ladder. Low TE and/or TD ratings may highlight tasks best omitted from training for new personnel. These task factors are, of course, not the only ones to weigh in making training decisions; the percentages of personnel performing the tasks, command concerns, the criticality of the tasks, and other important factors must also be carefully considered.

Training Emphasis (TE) — degree of emphasis that should be placed on each task for structured training of entry-level members:

- Eighty-eight DAFSC 2E2X1 senior noncommissioned officers (NCOs) rated tasks in the inventory on a scale from 0 (no training required) to 9 (extremely high training emphasis)
- Average TE rating was 1.72 with a standard deviation of 1.22
 - If a task has a TE rating at least one standard deviation above the mean, that is, of at least 2.94, it is probably important to provide new personnel with formal training on that task

Table 40 – Tasks with highest TE ratings:

- Most tasks with high TE ratings are from Duty A (Performing General Computer, Network, Switching, and Cryptographic Maintenance Activities) and Duty E (Maintaining Computers, Network, and Peripheral Equipment) and involve performing operational checks and isolating malfunction activities

Task Difficulty (TD) — amount of time needed to learn to perform that task satisfactorily:

- One-hundred DAFSC 2E2X1 senior NCOs rated the difficulty of tasks in the inventory using a scale from 1 (extremely low difficulty) to 9 (extremely high difficulty)
- TD ratings are normally adjusted so that tasks of average difficulty have a value of 5.00 and a standard deviation of 1.00
 - Any task with a difficulty of 6.00 or greater is therefore considered difficult to learn

Table 41 – Tasks with highest TD ratings:

- Also lists percent members performing these tasks by groups of 1-24 months' and 1-48 months' TAFMS, as well as members of the 3-, 5-, and 7-skill-level groups
- Tasks within Duties A (Performing General Computer, Network, Switching, and Cryptographic Maintenance Activities) and Y (Performing Management and Supervisory Activities) received the highest TD ratings, but they have low TE ratings
- Unlike tasks with high TE ratings, many tasks with high TD ratings have low percent members performing
 - This pattern is typical across many career fields because relatively few members perform the most difficult tasks

WHAT DO 2E2X1 TRAINING DOCUMENTS REFLECT?

Course Training Standard (CTS) Analysis

Technical school personnel from the 338th Training Squadron (338 TRS), Keesler AFB MS, matched JI tasks to CTS items. Per AETCI 36-2601, dated 14 July 1999, CTS elements that are performed by at least 20% of members in appropriate skill-level groups [particularly first-job (1-24 months' TAFMS) members and first-enlistment (1-48 months' TAFMS) members] should be included in the CTS. Of course, these are not the only criteria for inclusion in the CTS, and other rational considerations may argue against inclusion. Likewise, elements matched to tasks with less than 20% performing in first-job and first-enlistment groups should be closely reviewed by subject-matter experts for possible deletion from the CTS, unless other considerations (such as mission criticality or criticality to a particular MAJCOM) argue for inclusion of these "unsupported items." As stated above, several tasks not referenced to the CTS with at least 20% of the first-job or first-enlistment members performing should be reviewed by training personnel for possible addition to the CTS.

Table 42 – Examples of unsupported CTS elements along with the tasks matched to those items:

- Tasks matched to CTS elements were being performed by less than 20% of job incumbents in their first job or first enlistment
- A complete listing of CTS elements with tasks matched to elements can be found in the CTS report in the Training Extract

Table 43 – Examples of tasks not referenced to CTS elements with 20% or more members performing:

- A complete listing of tasks not referenced to the CTS can be found at the end of the CTS report in Training Extract; these tasks should be reviewed for possible addition to CTS

Overall, the CTS is generally supported by the survey data.

Plan of Instruction (POI) Analysis

In addition to the CTS, the POI for a course may also have unsupported objectives (included in the course but performed by few first-term airmen). Personnel from the 338 TRS also matched JI tasks to related training objectives in the POI for the entry-level course. POI blocks, units of instruction, and learning objectives were then compared to the standard set forth in AETCI 36-2601. This document indicates that tasks trained in the course but not performed by at least 30% of first-enlistment members should be considered for elimination from the course, unless other rational considerations argue for inclusion. This is especially so if TE ratings for the task are not particularly high.

Table 44 – Examples of POI unsupported objectives along with the tasks matched to those objectives:

- Tasks matched to POI objectives were being performed by less than 30% of job incumbents in their first job or first enlistment
- A complete listing of POI objectives and tasks matched to those objectives can be found in the POI report in the Training Extract; these POI objectives should be reviewed for possible revision

Table 45 – Examples of tasks not referenced to POI objectives with 30% or more members performing:

- A complete listing of tasks not referenced to the POI can be found at the end of the POI report in the Training Extract; these tasks should be reviewed for possible addition to POI

Overall, the POI is generally supported by the survey data.

JOB SATISFACTION ANALYSIS

An examination of job satisfaction indicators can give career ladder managers a better understanding of factors that may affect the job performance of career ladder airmen. The survey included attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions.

Job Satisfaction

Overall = Good

Table 46 – Job satisfaction data by job groups identified in **2E2X1 JOB STRUCTURE** section of this report:

- Intel E&I Independent Job has the highest job satisfaction ratings
- Computer Switch Maintenance IJ and STRATCOM Maintenance Technician IJ report low job satisfaction overall compared to the remaining jobs and clusters, but both are very small proportions of the sample

Table 47 displays comparative job satisfaction data between the current 2E2X1 OSR data and members from other 2E AFSCs surveyed in the previous 12 months. (Only two AFSCs met this criterion – AFSC 2E1X1, Satellite, Wideband, and Telemetry Systems and 2E1X2, Meteorological and Navigation Systems.) The results from the comparison data are summarized below:

- Overall, job satisfaction ratings for the 2E2X1 members are slightly lower compared to the 2E1X1 and 2E1X2 members
- 2E2X1 members report somewhat lower satisfaction across all three TAFMS groups regarding perceived use of training and sense of accomplishment from job

Table 48 displays job satisfaction data for the AD, ANG, and AFRC members. The results for the three components are summarized below:

- Job satisfaction ratings for the ANG members are higher than the AD and AFRC members, especially for job interest, perceived use of training, and sense of accomplishment from job

RETENTION DIMENSIONS

JIs also routinely collect information about factors that affect reenlistment and separation decisions. That is, respondents who say that they are likely to reenlist at the end of their present term (and those not eligible for retirement) are asked to indicate whether each of 31 different factors will have any effect on their intended decision and, if so, the degree to which each factor may influence their decision to reenlist. Respondents who indicate that they are likely to separate at the end of their present term (and those not eligible for retirement) are asked to indicate whether each of 31 different factors will have any effect on their intended decision and, if so, the degree to which each factor may influence their decision to separate. The degree is indicated on a 3-point scale ranging from "slight influence" to "strong influence."

Reenlistment

Table 49 – Lists the 31 factors in the order they appeared in the survey. The percent selecting each factor and the average rating for each factor by TAFMS group based on how much each factor may influence their decision to reenlist are also shown:

- Top 5 reasons members may choose to reenlist based on the highest percentages selecting each factor are listed below Table 49
 - Job security appeared for each of the three TAFMS groups as one of the top two reasons for reenlisting
 - Retirement benefits, military lifestyle, pay and allowances, and off-duty education or training opportunities were major influences on reenlistment for two of the three TAFMS groups

Separation

Table 50 – Displays the percentage of the members for each TAFMS group indicating that their plans to separate may be influenced by each factor as well as the average ratings by TAFMS group for the 31 factors based on the influence each factor may have on the respondents' decisions to separate:

- Top 5 reasons members in each TAFMS group may choose to separate based on the highest percentages selecting each factor are listed below Table 50
 - Military lifestyle and recognition of efforts appeared for each of the three TAFMS groups as top reasons for separating
 - Pay and allowances, bonus or special pay, and civilian job opportunities are among the top four factors that may influence the respondents' decisions to separate for two of the three TAFMS groups

TABLE 5

**MANAGEMENT CLUSTER (STG 69)
N=270 (17% of TOTAL SAMPLE)**

DEMOGRAPHICS

Average Time in Present Job	31 months
Average TAFMS	202 months
Predominant Paygrade	E-7 40%
Skill Levels	2E251 31%
	2E271 59%
	2E291 8%
Former AFSCs	2E2X1 63%
	2E3X1 33%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	PERCENT MEMBERS PERFORMING
	63	
Y1318	Counsel subordinates concerning personal matters	70
Y1356	Write recommendations for awards or decorations	68
Y1337	Evaluate personnel for compliance with performance standards	67
Y1343	Inspect personnel for compliance with military standards	63
Y1320	Determine or establish work assignments or priorities	62
Y1315	Conduct supervisory performance feedback sessions	62
Y1344	Interpret policies, directives, or procedures for subordinates	61
Y1355	Write or indorse military performance reports	60
X1290	Brief personnel concerning training programs or matters	59
Y1313	Conduct self-inspections or self-assessments	59
Y1312	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	58
Y1357	Write replies to inspection reports	58
X1294	Counsel trainees on training progress	56
Y1317	Conduct supervisory orientations for newly assigned personnel	56
X1303	Evaluate progress of trainees	55
X1295	Determine training requirements	55
Y1333	Establish performance standards for subordinates	55
U1226	Maintain administrative files	55
Y1350	Schedule personnel for TDY assignments, leaves, or passes	55
Y1326	Develop or establish work schedules	54
Y1335	Evaluate inspection report findings or inspection procedures	53
X1293	Conduct on-the-job training (OJT)	53
X1305	Maintain training records or files	52
Y1338	Evaluate personnel for promotion, demotion, reclassification, or special awards	52
Y1342	Initiate actions required due to substandard performance of personnel	52
Y1319	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	50
U1235	Write minutes of briefings, conferences, or meetings	49
Y1310	Assign personnel to work areas or duty positions	49
Y1316	Conduct safety inspections of equipment or facilities	48
X1302	Evaluate effectiveness of training programs, plans, or procedures	47
U1216	Compile data for records, reports, logs, or trend analyses	47

TABLE 6**JOBS IDENTIFIED WITHIN MANAGEMENT CLUSTER****TRAINING JOB (STG 300)****N=17 (6% OF CLUSTER)****DEMOGRAPHICS**

Average Time in Present Job	44 months
Average TAFMS	183 months
Predominant Paygrades	E-5 35%
	E-7 35%
Predominant Skill Level	2E271 53%
Former AFSCs	2E2X1 65%
	2E3X1 35%

DISTINGUISHING TASKS

X1303	Evaluate progress of trainees
X1297	Develop training programs, plans, or procedures
X1305	Maintain training records or files
X1295	Determine training requirements
X1299	Develop or procure training materials or aids
X1293	Conduct on-the-job training (OJT)
X1290	Brief personnel concerning training programs or matters
X1294	Counsel trainees on training progress
X1304	Inspect training materials or aids for operation or suitability
X1302	Evaluate effectiveness of training programs, plans, or procedures
X1307	Prepare job qualification standards (JQSs)
X1296	Develop formal course curricula, plans of instruction (POIs), or specialty training standards (STSs)
X1292	Conduct formal course classroom training
X1301	Evaluate training methods or techniques of instructors
X1300	Establish or maintain study reference files
X1308	Write training reports
X1289	Administer or score tests
X1298	Develop written tests
X1306	Personalize lesson plans
X1291	Complete student entry or withdrawal forms

QUALITY ASSURANCE JOB (STG 336)**N=10 (4% OF CLUSTER)****DEMOGRAPHICS**

Average Time in Present Job	20 months
Average TAFMS	153 months
Predominant Paygrade	E-5 50%
Predominant Skill Level	2E251 70%
Former AFSCs	2E2X1 40%
	2E3X1 30%

DISTINGUISHING TASKS

Y1336	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program
A0124	Perform quality control (QC) or technical inspections
V1239	Evaluate serviceability of equipment tools, parts or supplies
Y1314	Conduct staff assistance visits, inspections or audits
U1219	Establish or maintain automated technical order management systems (ATOMS) accounts
A0054	Inspect communications-electronic (C-E) equipment for physical damage
X1302	Evaluate effectiveness of training programs, plans or procedures
X1308	Write training reports
T1200	Analyze core automated maintenance systems (CAMS), G081, or access generated data

MAINTENANCE SUPPORT JOB (STG 385) N=18 (7% OF CLUSTER)

DEMOGRAPHICS

Average Time in Present Job	23 months
Average TAFMS	164 months
Predominant Paygrade	E-5 39%
Skill Levels	2E251 50%
	2E271 50%
Former AFSCs	2E2X1 78%
	2E3X1 17%

DISTINGUISHING TASKS

T1215	Verify accuracy of CAMS, GO81, or access generated database daily inputs
T1213	Update personnel data files in CAMS, GO81, or access generated databases
T1214	Update workcenter training reports in CAMS, GO81, or access generated databases
T1208	Retrieve CAMS, GO81, or access generated database listings or reports

NCOIC JOB (STG 458) N=132 (49% OF CLUSTER)

DEMOGRAPHICS

Average Time in Present Job	29 months
Average TAFMS	229 months
Predominant Paygrade	E-7 53%
Predominant Skill Level	2E251 69%
Former AFSCs	2E2X1 63%
	2E3X1 36%

DISTINGUISHING TASKS

Top tasks are same as tasks performed by cluster

TABLE 7

**GENERAL COMPUTER, NETWORK, AND
PERIPHERAL EQUIPMENT CLUSTER (STG 109)
N=319 (19% of TOTAL SAMPLE)**

DEMOGRAPHICS

Average Time in Present Job	41 months	
Average TAFMS	117 months	
Predominant Paygrade	E-5	35%
Skill Levels	2E231	8%
	2E251	57%
	2E271	35%
	2E2X1	70%
Former AFSCs	2E3X1	18%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	PERCENT MEMBERS PERFORMING
	<i>112</i>	
A0089	Operationally check LAN components, such as routers, servers, hubs, network interface controllers (NICs), or workstations	86
E0562	Operationally check NICs	85
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or workstations	83
E0549	Isolate NIC malfunctions	82
E0560	Operationally check laptop computers	82
E0563	Operationally check printers	81
E0570	Remove and replace NICs	81
A0088	Operationally check local area networks (LANs)	79
E0544	Isolate desktop computer malfunctions	78
E0557	Operationally check desktop computers	78
E0547	Isolate laptop computer malfunctions	78
E0571	Remove or replace desktop computer subassemblies	77
E0550	Isolate printer malfunctions	76
E0573	Remove or replace hubs	75
E0559	Operationally check hubs	74
B0227	Isolate LAN component malfunctions, such as routers, servers, or hubs	68
E0565	Operationally check routers	68
E0546	Isolate hub malfunctions	67
E0581	Remove or replace switches	67
C0410	Remove or replace printers	67
A0098	Operationally check printers	66
E0574	Remove or replace laptop computer subassemblies	65
C0390	Remove or replace keyboards	65
E0578	Remove or replace routers	64
E0552	Isolate router malfunctions	61
A0087	Operationally check keyboards	61
E0569	Operationally check switches	60
E0576	Remove or replace printer subassemblies	58
D0452	Isolate malfunctions to cables	58
B0303	Isolate malfunctions to printers	57
X1293	Conduct on-the-job training (OJT)	54

TABLE 8**JOBS IDENTIFIED WITHIN GENERAL COMPUTER, NETWORK, AND
PERIPHERAL EQUIPMENT CLUSTER****SMALL COMPUTER MAINTENANCE TECHNICIAN JOB (STG 240)
N=273 (86% OF CLUSTER)****DEMOGRAPHICS**

Average Time in Present Job	43 months	
Average TAFMS	123 months	
Predominant Paygrade	E-5	37%
Predominant Skill Level	2E251	58%
Former AFSCs	2E2X1	69%
	2E3X1	19%

DISTINGUISHING TASKS

E0560	Operationally check laptop computers
E0557	Operationally check desktop computers
E0544	Isolate desktop computer malfunctions
E0571	Remove or replace desktop computer subassemblies
E0547	Isolate laptop computer malfunctions
A0089	Operationally check LAN components, such as routers, servers, hubs, network interface controllers (NICs), or workstations
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or workstations
A0088	Operationally check local area networks (LANs)
E0574	Remove or replace laptop computer subassemblies

**INFRASTRUCTURE TECHNICIAN JOB (STG 277)
N=27 (8% OF CLUSTER)****DEMOGRAPHICS**

Average Time in Present Job	27 months	
Average TAFMS	93 months	
Predominant Paygrade	E-4	37%
Predominant Skill Level	2E251	52%
Former AFSCs	2E2X1	85%
	2E3X1	7%

DISTINGUISHING TASKS

E0581	Remove or replace switches
E0578	Remove or replace routers
B0227	Isolate LAN component malfunctions, such as routers, servers, or hubs
E0573	Remove or replace hubs
E0552	Isolate router malfunctions

TABLE 9

**JOINT SURVEILLANCE SYSTEM (JSS) INDEPENDENT JOB (STG 243)
N=48 (3% of TOTAL SAMPLE)**

DEMOGRAPHICS			
Average Time in Present Job		54 months	
Average TAFMS		68 months	
Predominant Paygrades		E-5	38%
		E-4	35%
Skill Levels		2E231	8%
		2E251	71%
		2E271	21%
Former AFSCs	2E2X1	71%	
	2E3X1	4%	

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	131	PERCENT MEMBERS PERFORMING
A0097	Operationally check power supplies		92
C0409	Remove or replace power supplies		92
C0390	Remove or replace keyboards		90
A0142	Remove or replace fan or blower assemblies		90
A0098	Operationally check printers		88
B0301	Isolate malfunctions to power supplies		85
B0325	Perform PMIs on cabinets, racks, or subfloors		83
A0063	Isolate system malfunctions to major system components		81
B0345	Perform PMIs on power supplies		81
B0322	Perform PMIs on blowers or cooling fans		81
B0195	Adjust or align power supplies		81
A0034	Connect or disconnect power, power panels, or equipment leads		81
C0379	Remove or replace electronic circuit cards or printed circuit boards (PCBs)		79
A0087	Operationally check keyboards		79
A0052	Inspect cabinets for corrosion		79
B0329	Perform PMIs on display equipment, such as CRTs		77
A0116	Perform equipment power-up or power-down procedures		77
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers		77
A0020	Bench check power supplies		77
C0386	Remove or replace fuses		77
B0333	Perform PMIs on keyboards		75
B0285	Isolate malfunctions to keyboards		75
A0053	Inspect cables for corrosion		75
B0239	Isolate power supply malfunctions		73
A0024	Clean facilities		71
A0118	Perform general electrostatic discharge (ESD) procedures		71
C0410	Remove or replace printers		71
A0027	Clean or lubricate equipment, other than IDFs		69
A0140	Remove or replace cabinet minor hardware		67
D0452	Isolate malfunctions to cables		67
B0226	Isolate keyboard component malfunctions		67
B0240	Isolate printer malfunctions		67
B0336	Perform PMIs on maintenance or operator panels or consoles		65

TABLE 10

**COMPUTER SWITCH MAINTENANCE INDEPENDENT JOB (STG 309)
N=16 (1% of TOTAL SAMPLE)**

DEMOGRAPHICS

Average Time in Present Job	55 months
Average TAFMS	47 months
Predominant Paygrade	E-4 44%
Skill Levels	2E231 31%
	2E251 44%
	2E271 25%
Former AFSCs	2E2X1 81%
	2E3X1 19%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	PERCENT MEMBERS PERFORMING
	166	
A0116	Perform equipment power-up or power-down procedures	94
A0053	Inspect cables for corrosion	94
A0034	Connect or disconnect power, power panels, or equipment leads	88
A0160	Test circuits for grounds, opens, or shorts	88
A0063	Isolate system malfunctions to major system components	88
A0118	Perform general electrostatic discharge (ESD) procedures	88
A0049	Inspect batteries for corrosion	88
A0097	Operationally check power supplies	88
B0239	Isolate power supply malfunctions	81
A0087	Operationally check keyboards	81
A0146	Remove or replace wiring	81
A0064	Isolate system malfunctions to transmission lines	81
A0107	Operationally check test equipment	81
A0024	Clean facilities	75
B0290	Isolate malfunctions to maintenance or operator panels or consoles	75
A0035	Coordinate dispatches with maintenance control	75
A0079	Operationally check cryptographic equipment	75
A0098	Operationally check printers	75
A0056	Inspect frames for corrosion	75
A0036	Coordinate equipment or system repairs with technical controllers	75
A0001	Analyze equipment outages or malfunction reports	75
A0038	Coordinate systems operation with distant stations to verify equipment operation	75
A0127	Perform strapping options on equipment	75
A0055	Inspect electronic drawers for corrosion	75
A0031	Configure circuit paths for data lines	69
B0267	Isolate malfunctions to cryptographic equipment	69
C0409	Remove or replace power supplies	69
C0390	Remove or replace keyboards	69

TABLE 11

AIRCRAFT COMPUTER MAINTAINER INDEPENDENT JOB (STG 402)
N=30 (2% of TOTAL SAMPLE)

DEMOGRAPHICS		
Average Time in Present Job	44 months	
Average TAFMS	88 months	
Predominant Paygrade	E-4	37%
Skill Levels	2E231	23%
	2E251	60%
	2E271	17%
Former AFSCs	2E2X1	90%
	2E3X1	0%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	140	PERCENT MEMBERS PERFORMING
A0116	Perform equipment power-up or power-down procedures		97
F0688	Perform preflight inspections on keyboards		93
A0087	Operationally check keyboards		93
C0390	Remove or replace keyboards		93
A0083	Operationally check display equipment		90
F0686	Perform preflight inspections on display equipment		87
F0690	Perform preflight inspections on maintenance or operator panels or consoles		87
T1209	Review aircraft flight or maintenance records, such as AFTO Forms 781-series		87
V1242	Inventory equipment, tools, parts, or supplies		87
B0301	Isolate malfunctions to power supplies		87
A0140	Remove or replace cabinet minor hardware		87
A0097	Operationally check power supplies		87
C0409	Remove or replace power supplies		83
A0113	Perform data destruct procedures		83
C0410	Remove or replace printers		83
A0146	Remove or replace wiring		83
A0063	Isolate system malfunctions to major system components		80
F0603	Connect external power to aircraft		80
F0602	Connect external cooling to aircraft		80
B0285	Isolate malfunctions to keyboards		80
T1207	Perform time compliance technical order (TCTO) inspections		80
A0098	Operationally check printers		80
A0118	Perform general electrostatic discharge (ESD) procedures		80
A0093	Operationally check multiplexers		80
T1204	Initiate or annotate aircraft flight or maintenance records, such as AFTO Forms 781-series		77
B0221	Isolate display equipment malfunctions, such as CRTs		77
B0274	Isolate malfunctions to display equipment, such as CRTs		77
A0142	Remove or replace fan or blower assemblies		77
C0402	Remove or replace multiplexers		77
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers		73
C0375	Remove or replace display equipment, such as CRTs		73

TABLE 12

**INTEL ENGINEERING AND INSTALLATION (E&I) INDEPENDENT JOB (STG 474)
N=13 (1% of TOTAL SAMPLE)**

DEMOGRAPHICS		
Average Time in Present Job	34 months	
Average TAFMS	128 months	
Predominant Paygrade	E-5	54%
Skill Levels	2E231	8%
	2E251	77%
	2E271	15%
	2E2X1	31%
Former AFSCs	2E3X1	69%
TASKS	AVERAGE NUMBER OF TASKS PERFORMED	PERCENT MEMBERS PERFORMING
	176	
D0492	Remove or replace cable runs	100
A0089	Operationally check LAN components, such as routers, servers, hubs, network interface controllers (NICs), or workstations	100
C0396	Remove or replace modems	100
A0111	Perform bit error rate tests (BERTs)	92
A0093	Operationally check multiplexers	92
A0046	Fabricate support items, cables, or connectors	92
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or workstations	92
N1005	Operationally check modems, ASUs, CSUs, or DSUs	92
N1004	Isolate modem, ASU, CSU, or DSU malfunctions	92
E0578	Remove or replace routers	92
C0402	Remove or replace multiplexers	92
B0227	Isolate LAN component malfunctions, such as routers, servers, or hubs	85
B0269	Isolate malfunctions to data lines	85
D0452	Isolate malfunctions to cables	85
D0442	Fabricate or modify cable installations	85
B0295	Isolate malfunctions to multiplexers	85
A0139	Reconfigure equipment racks	85
A0107	Operationally check test equipment	85
A0079	Operationally check cryptographic equipment	85
E0552	Isolate router malfunctions	85
A0031	Configure circuit paths for data lines	85
O1017	Configure multiplexers	85
O1019	Operationally check multiplexers	85
A0127	Perform strapping options on equipment	85
V1237	Coordinate maintenance of equipment with on-base agencies	85
N1013	Remove or replace modems, ASUs, CSUs, or DSUs	85
N1010	Program modems, ASUs, CSUs, or DSUs for system operations	85
C0371	Remove or replace cryptographic equipment	85
L0860	Operationally check KG-194-series equipment	85
A0118	Perform general electrostatic discharge (ESD) procedures	85
A0034	Connect or disconnect power, power panels, or equipment leads	85
B0236	Isolate multiplexer malfunctions	77

TABLE 13

TACTICAL COMM TECHNICIAN INDEPENDENT JOB (STG 445)
N=19 (1% of TOTAL SAMPLE)

DEMOGRAPHICS

Average Time in Present Job	40 months	
Average TAFMS	125 months	
Predominant Paygrade	E-5	54%
Skill Levels	2E231	16%
	2E251	47%
	2E271	37%
	2E2X1	58%
Former AFSCs	2E3X1	32%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	163	PERCENT MEMBERS PERFORMING
X1293	Conduct on-the-job training (OJT)		100
W1288	Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles		100
A0116	Perform equipment power-up or power-down procedures		95
W1287	Set up or tear down shelters		95
W1264	Erect tents		95
W1272	Perform camouflage procedures		95
W1274	Perform chemical warfare agent decontamination procedures		95
W1282	Prepare equipment for deployments		89
T1210	Review preventive maintenance schedules		89
W1271	Pack or palletize mobility or contingency equipment for shipment or movement		89
V1242	Inventory equipment, tools, parts, or supplies		89
C0371	Remove or replace cryptographic equipment		89
W1265	Inspect mobility bags or kits		89
A0024	Clean facilities		84
A0054	Inspect communications-electronics (C-E) equipment for physical damages		84
W1277	Perform pallet buildup activities		84
W1262	Don or doff chemical warfare personal protective clothing		84
A0079	Operationally check cryptographic equipment		84
W1273	Perform camp security		84
B0267	Isolate malfunctions to cryptographic equipment		84
A0063	Isolate system malfunctions to major system components		79
X1305	Maintain training records or files		79
X1294	Counsel trainees on training progress		79
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers		79
B0354	Perform PMIs on tactical switchboards		79
A0034	Connect or disconnect power, power panels, or equipment leads		79
A0057	Inspect mobilizers for corrosion		79
P1064	Load variables using KYK-13s		79
A0112	Perform corrosion control procedures on equipment or supplies		79
B0247	Isolate tactical switchboard malfunctions		79
D0483	Perform inspections of cables, cable troughs, or connectors, other than for corrosion		79

TABLE 14

TACTICAL SWITCH MAINTENANCE INDEPENDENT JOB (STG 348)
N=10 (1% of TOTAL SAMPLE)

DEMOGRAPHICS

Average Time in Present Job	44 months	
Average TAFMS	82 months	
Predominant Paygrade	E-5	70%
Skill Levels	2E231	20%
	2E251	60%
	2E271	20%
	2E2X1	80%
Former AFSCs	2E3X1	10%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	173	PERCENT MEMBERS PERFORMING
D0511	Remove or replace handsets		100
D0520	Remove or replace twisted-pair cables		100
D0514	Remove or replace jumpers		100
A0116	Perform equipment power-up or power-down procedures		90
P1064	Load variables using KYK-13s		90
D0512	Remove or replace headsets		90
D0452	Isolate malfunctions to cables		90
A0097	Operationally check power supplies		90
D0439	Connect or disconnect inside cables to or from connecting blocks or junction boxes		80
X1293	Conduct on-the-job training (OJT)		80
A0046	Fabricate support items, cables, or connectors		80
A0085	Operationally check electronic line circuits		80
W1287	Set up or tear down shelters		80
W1264	Erect tents		80
A0054	Inspect communications-electronics (C-E) equipment for physical damages		80
A0077	Operationally check call processing circuits		80
D0479	Operationally check singleline telephones		80
A0080	Operationally check dial circuits		80
B0284	Isolate malfunctions to junction boxes		80
A0034	Connect or disconnect power, power panels, or equipment leads		80
W1288	Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles		80
D0480	Perform cable operational tests		80
C0361	Remove or replace batteries		80
D0477	Operationally check headsets		80
A0160	Test circuits for grounds, opens, or shorts		80
A0024	Clean facilities		80
D0516	Remove or replace singleline telephones		80
D0476	Operationally check handsets		80
D0465	Isolate malfunctions to singleline telephones		80
D0536	Terminate cables by soldering		80
D0533	Terminate cables with punch-down devices		80
A0087	Operationally check keyboards		80
D0438	Connect or disconnect fiber optic cables to or from interface equipment		70
B0247	Isolate tactical switchboard malfunctions		70
C0422	Remove or replace tactical switchboard components		70

TABLE 15

**COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC (CNSC)
INDEPENDENT JOB (STG 338)
N=365 (22% of TOTAL SAMPLE)**

DEMOGRAPHICS		
Average Time in Present Job	56 months	
Average TAFMS	82 months	
Predominant Paygrades	E-6	32%
	E-5	30%
Skill Levels	2E231	20%
	2E251	60%
	2E271	20%
Former AFSCs	2E2X1	58%
	2E3X1	30%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	321	PERCENT MEMBERS PERFORMING
A0116	Perform equipment power-up or power-down procedures		89
V1242	Inventory equipment, tools, parts, or supplies		88
A0054	Inspect communications-electronics (C-E) equipment for physical damages		88
X1293	Conduct on-the-job training (OJT)		87
A0118	Perform general electrostatic discharge (ESD) procedures		86
A0079	Operationally check cryptographic equipment		85
D0452	Isolate malfunctions to cables		82
A0053	Inspect cables for corrosion		82
A0024	Clean facilities		81
A0063	Isolate system malfunctions to major system components		81
A0046	Fabricate support items, cables, or connectors		79
V1239	Evaluate serviceability of equipment, tools, parts, or supplies		77
V1246	Pick up, deliver, or store equipment, tools, parts, or supplies		77
A0098	Operationally check printers		77
C0371	Remove or replace cryptographic equipment		77
A0146	Remove or replace wiring		76
A0112	Perform corrosion control procedures on equipment or supplies		76
C0390	Remove or replace keyboards		76
C0410	Remove or replace printers		76
X1305	Maintain training records or files		75
V1241	Initiate requisitions for equipment, tools, parts, or supplies		75
C0409	Remove or replace power supplies		75
C0386	Remove or replace fuses		75
V1243	Issue or log turn-ins of equipment, tools, parts, or supplies		74
A0127	Perform strapping operations on equipment		74
X1294	Counsel trainees on training progress		73
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers		73
B0267	Isolate malfunctions to cryptographic equipment		73
A0034	Connect or disconnect power, power panels, or equipment leads		73
A0087	Operationally check keyboards		73
V1240	Identify and report equipment or supply problems		72

TABLE 16

STRATCOM MAINTENANCE TECHNICIAN INDEPENDENT JOB (STG 412)
N=18 (1% of TOTAL SAMPLE)

DEMOGRAPHICS

Average Time in Present Job	45 months	
Average TAFMS	71 months	
Predominant Paygrade	E-4	50%
Skill Levels	2E231	33%
	2E251	61%
	2E271	6%
	2E2X1	78%
Former AFSCs	2E3X1	11%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	232	PERCENT MEMBERS PERFORMING
A0024	Clean facilities		100
D0433	Bench check headsets		100
D0432	Bench check handsets		100
D0448	Isolate handset malfunctions		100
D0449	Isolate headset malfunctions		100
D0447	Isolate ESA malfunctions		100
D0511	Remove or replace handsets		100
D0512	Remove or replace headsets		100
F0623	Isolate launch control facility (LCF) or LF telephone malfunctions		94
F0662	Operationally check LCF or LF telephones		94
D0476	Operationally check handsets		94
D0477	Operationally check headsets		94
D0496	Remove or replace ESAs		94
B0322	Perform PMIs on blowers or cooling fans		94
D0482	Perform ESA continuity checks		94
C0386	Remove or replace fuses		94
A0020	Bench check power supplies		94
C0409	Remove or replace power supplies		94
A0142	Remove or replace fan or blower assemblies		94
F0596	Bench check summary fault units (SFUs)		94
F0595	Bench check red DC patches		94
A0146	Remove or replace wiring		94
F0714	Remove or replace SFUs		94
F0712	Remove or replace red DC patches		94
D0462	Isolate malfunctions to headsets		89
D0460	Isolate malfunctions to handsets		89
B0301	Isolate malfunctions to power supplies		89
D0445	Inspect ESAs for corrosion		89
F0592	Bench check jackboxes, other than alarm jackboxes		89
C0396	Remove or replace modems		89
F0665	Operationally check red DC patches		89
F0673	Penetrate or depart WS-133A gates or launch support buildings (LSBs)		83
A0097	Operationally check power supplies		83
A0054	Inspect communications-electronics (C-E) equipment for physical damages		83
A0160	Test circuits for grounds, opens, or shorts		83

TABLE 17

**CRYPTO MAINTENANCE TECHNICIAN INDEPENDENT JOB (STG 249)
N=58 (4% of TOTAL SAMPLE)**

DEMOGRAPHICS

Average Time in Present Job	29 months
Average TAFMS	67 months
Predominant Paygrade	E-4 48%
Skill Levels	2E231 36%
	2E251 48%
	2E271 16%
Former AFSCs	2E2X1 31%
	2E3X1 67%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	151	PERCENT MEMBERS PERFORMING
A0079	Operationally check cryptographic equipment		98
L0853	Operationally check KG-84-series equipment		93
L0808	Isolate KG-84-series malfunctions		91
L0938	Remove or replace KG-84-series equipment		91
B0218	Isolate cryptographic equipment malfunctions		88
P1064	Load variables using KYK-13s		88
B0267	Isolate malfunctions to cryptographic equipment		84
A0127	Perform strapping options on equipment		84
A0011	Bench check cryptographic equipment		83
L0869	Operationally check KIV-7-series equipment		83
S1188	Load cryptographic variables		81
L0824	Isolate KIV-7-series malfunctions		81
P1059	Load variables using KOI-18s		78
P1079	Operationally check KYK-13 equipment		78
P1057	Load variables using CYZ-10s		76
L0837	Load variables to KG-type cryptographic equipment		76
C0371	Remove or replace cryptographic equipment		76
X1293	Conduct on-the-job training (OJT)		72
V1242	Inventory equipment, tools, parts, or supplies		72
A0118	Perform general electrostatic discharge (ESD) procedures		72
L0954	Remove or replace KIV-7-series equipment		72
A0024	Clean facilities		71
A0049	Inspect batteries for corrosion		71
P1053	Isolate KYK-13 malfunctions		71

TABLE 18

SECURE TELEPHONE SWITCH TECHNICIAN INDEPENDENT JOB (STG 387)
N=10 (1% of TOTAL SAMPLE)

DEMOGRAPHICS		
Average Time in Present Job	101 months	
Average TAFMS	155 months	
Predominant Paygrade	E-5	40%
Skill Levels	2E251	30%
	2E271	70%
	2E2X1	0%
Former AFSCs	2E3X1	90%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	106	PERCENT MEMBERS PERFORMING
A0079	Operationally check cryptographic equipment		100
L0853	Operationally check KG-84-series equipment		100
L0808	Isolate KG-84-series malfunctions		100
L0895	Perform PMIs on KG-84-series equipment		100
L0938	Remove or replace KG-84-series equipment		100
A0011	Bench check cryptographic equipment		100
J0777	Perform loopback tests or self-tests on AN/UGC-144s		90
J0774	Configure AN/UGC-144s for use with KG-84A/Cs		90
J0776	Operationally check AN/UGC-144 equipment		90
J0775	Isolate AN/UGC-144 malfunctions		90
C0371	Remove or replace cryptographic equipment		90
J0780	Remove or replace AN/UGC-144s		90
W1277	Perform pallet buildup activities		90
W1282	Prepare equipment for deployments		90
J0773	Configure AN/UGC-144s for Mode I or Mode II operation		80
B0218	Isolate cryptographic equipment malfunctions		80
S1188	Load cryptographic variables		80
J0778	Perform PMIs on AN/UGC-144s		80
W1272	Perform camouflage procedures		80
P1079	Operationally check KYK-13 equipment		80
C0410	Remove or replace printers		80
B0267	Isolate malfunctions to cryptographic equipment		70
P1064	Load variables using KYK-13s		70
M0997	Remove or replace KY-68/78s		70
M0969	Isolate KY-68/78 malfunctions		70
J0779	Remove or replace AN/UGC-144 batteries		70
P1059	Load variables using KOI-18s		70
W1287	Set up or tear down shelters		70
A0127	Perform strapping options on equipment		70
W1264	Erect tents		70
R1140	Disconnect signal cables		70
R1157	Install printers		70

TABLE 19

AVERAGE PERCENT TIME SPENT ON DUTIES BY 2E2X1 CLUSTERS AND JOBS

DUTIES	MGMT CLUSTER (N=270) (STG 69)	GEN COMP NETWORK & PERI EQUIP CLUSTER (N=319) (STG 109)	JSS IJ (N=48) (STG 243)	COMPUTER SWITCH MAINT IJ (N=16) (STG 309)
A PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC MAINTENANCE ACTIVITIES	9	21	34	43
B PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE MAINTENANCE INSPECTION (PMI) ACTIVITIES	2	13	26	23
C REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC EQUIPMENT OR COMPONENTS	1	6	11	9
D MAINTAINING CABLES, WIRING, AND ASSOCIATED EQUIPMENT	1	9	5	9
E MAINTAINING COMPUTERS, NETWORK, AND PERIPHERAL EQUIPMENT	1	25	3	2
F MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM) EQUIPMENT	*	*	1	*
G MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL EQUIPMENT	0	*	0	*
H MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYPEWRITER (TRTT) EQUIPMENT	0	0	*	*
I MAINTAINING AN/UGC-141-SERIES FIXED-RECORD COMMUNICATIONS TELETYPEWRITER (FRCT) EQUIPMENT	0	0	0	0
J MAINTAINING AN/UGC-144 COMMUNICATIONS TERMINALS	*	*	0	0
K MAINTAINING AN/UYK-83A/85A TACTICAL COMPUTERS	0	0	*	0
L MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMENT	1	2	1	4
M MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT	*	*	*	1
N MAINTAINING MODEM, ANALOG SERVICE UNIT (ASU), CHANNEL SERVICE UNIT (CSU), AND DATA SERVICE UNIT (DSU) EQUIPMENT	*	1	*	0
O MAINTAINING MULTIPLEXERS	*	*	1	1
P MAINTAINING CRYPTOGRAPHIC ANCILLARY EQUIPMENT	*	1	1	3
Q MAINTAINING SECURE DIGITAL SWITCHES	*	*	1	*
R PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	2	3	3	1
S PERFORMING OPERATOR ACTIVITIES	1	2	1	*
T PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	6	1	2	*
U PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	9	2	2	1
V PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	5	2	2	*
W PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	5	2	*	1
X PERFORMING TRAINING ACTIVITIES	15	4	3	*
Y PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	43	5	2	*

* Indicates less than 1%

Columns may not add up to 100 due to rounding

TABLE 19 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY 2E2X1 CLUSTERS AND JOBS

DUTIES	AIRCRAFT COMPUTER MAINT IJ (N=30) (STG 402)	INTEL E&I IJ (N=13) (STG 474)	TACTICAL COMM TECH IJ (N=19) (STG 445)	TACTICAL SWITCH MAINT IJ (N=10) (STG 348)	CNSC IJ (N=365) (STG 338)
A PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC MAINTENANCE ACTIVITIES	22	25	20	25	20
B PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE MAINTENANCE INSPECTION (PMI) ACTIVITIES	19	13	14	14	14
C REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC EQUIPMENT OR COMPONENTS	11	4	7	7	6
D MAINTAINING CABLES, WIRING, AND ASSOCIATED EQUIPMENT	3	11	8	22	9
E MAINTAINING COMPUTERS, NETWORK, AND PERIPHERAL EQUIPMENT	1	4	1	2	5
F MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM) EQUIPMENT	14	0	*	1	2
G MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL EQUIPMENT	*	0	*	*	*
H MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYPEWRITER (TRTT) EQUIPMENT	0	0	0	*	*
I MAINTAINING AN/UGC-141-SERIES FIXED-RECORD COMMUNICATIONS TELETYPEWRITER (FRCT) EQUIPMENT	0	*	0	*	*
J MAINTAINING AN/UGC-144 COMMUNICATIONS TERMINALS	0	0	1	1	*
K MAINTAINING AN/UYK-83A/85A TACTICAL COMPUTERS	0	*	0	*	*
L MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMENT	*	6	5	3	4
M MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT	0	*	2	2	1
N MAINTAINING MODEM, ANALOG SERVICE UNIT (ASU), CHANNEL SERVICE UNIT (CSU), AND DATA SERVICE UNIT (DSU) EQUIPMENT	0	4	*	1	1
O MAINTAINING MULTIPLEXERS	2	5	*	*	1
P MAINTAINING CRYPTOGRAPHIC ANCILLARY EQUIPMENT	0	6	4	2	3
Q MAINTAINING SECURE DIGITAL SWITCHES	*	0	*	*	*
R PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	3	7	3	4	4
S PERFORMING OPERATOR ACTIVITIES	2	1	2	1	2
T PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	7	1	6	*	3
U PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	2	3	3	*	3
V PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	4	3	3	2	3
W PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	2	*	10	6	3
X PERFORMING TRAINING ACTIVITIES	3	1	5	2	4
Y PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	6	6	7	1	9

* Indicates less than 1%

Columns may not add up to 100 due to rounding

TABLE 19 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY 2E2X1 CLUSTERS AND JOBS

DUTIES	STRATCOM MAINT TECH IJ (N=18) (STG 412)	CRYPTO MAINT TECH IJ (N=58) (STG 249)	SECURE TELE SWITCH TECH IJ (N=10) (STG 387)
A PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC MAINTENANCE ACTIVITIES	25	25	22
B PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE MAINTENANCE INSPECTION (PMI) ACTIVITIES	15	9	7
C REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC EQUIPMENT OR COMPONENTS	8	4	6
D MAINTAINING CABLES, WIRING, AND ASSOCIATED EQUIPMENT	18	7	4
E MAINTAINING COMPUTERS, NETWORK, AND PERIPHERAL EQUIPMENT	1	4	2
F MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM) EQUIPMENT	17	*	1
G MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL EQUIPMENT	*	*	0
H MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYPEWRITER (TRTT) EQUIPMENT	*	0	0
I MAINTAINING AN/UGC-141-SERIES FIXED-RECORD COMMUNICATIONS TELETYPEWRITER (FRCT) EQUIPMENT	*	0	0
J MAINTAINING AN/UGC-144 COMMUNICATIONS TERMINALS	*	*	8
K MAINTAINING AN/UYK-83A/85A TACTICAL COMPUTERS	*	0	0
L MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMENT	2	13	11
M MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT	*	3	4
N MAINTAINING MODEM, ANALOG SERVICE UNIT (ASU), CHANNEL SERVICE UNIT (CSU), AND DATA SERVICE UNIT (DSU) EQUIPMENT	*	3	1
O MAINTAINING MULTIPLEXERS	*	1	0
P MAINTAINING CRYPTOGRAPHIC ANCILLARY EQUIPMENT	2	9	7
Q MAINTAINING SECURE DIGITAL SWITCHES	*	*	*
R PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	2	3	6
S PERFORMING OPERATOR ACTIVITIES	1	1	2
T PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	2	2	1
U PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	1	4	1
V PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2	4	2
W PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	*	2	11
X PERFORMING TRAINING ACTIVITIES	2	2	2
Y PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	3	3	2

* Indicates less than 1%

Columns may not add up to 100 due to rounding

TABLE 20

SPECIALTY JOB COMPARISON BETWEEN CURRENT AND 1998 SURVEYS

PRESENT SURVEY (N=1,636)	1998 SURVEY ELECTRONIC COMPUTER AND SWITCHING SYSTEMS (N=1,929)	1998 SURVEY SECURE COMMUNICATIONS SYSTEMS (N=1,155)
MANAGEMENT CLUSTER - Training Job - Quality Assurance Job - Maintenance Support Job - NCOIC Job	SUPERVISORY CLUSTER TECHNICAL TRAINING INSTRUCTOR IJ QUALITY ASSURANCE IJ JOB CONTROLLER IJ *	MANAGEMENT/STAFF CLUSTER FORMAL TRAINING IJ UNIT TRAINING IJ QUALITY CONTROL IJ MANAGEMENT/STAFF CLUSTER - Maintenance Support Job
GENERAL COMPUTER, NETWORK, AND PERIPHERAL EQUIPMENT CLUSTER - Small Computer Maintenance Technician Job - Infrastructure Technician Job	SMALL COMPUTER AND PERIPHERAL EQUIPMENT MAINTENANCE CLUSTER NETWORK ADMINISTRATION CLUSTER - Network Maintenance Job	SMALL COMPUTER MAINTENANCE IJ LAN ADMINISTRATION IJ
JOINT SURVEILLANCE SYSTEM (JSS) IJ	*	*
COMPUTER SWITCH MAINTENANCE IJ	GENERAL COMPUTER AND SWITCHING MAINTENANCE CLUSTER	*
AIRCRAFT COMPUTER MAINTAINER IJ	GENERAL COMPUTER AND SWITCHING MAINTENANCE CLUSTER - Airborne Computer Maintenance Job	*
INTEL ENGINEERING AND INSTALLATION (E&I) IJ	NETWORK ADMINISTRATION CLUSTER - Network Installation Job	ENGINEERING AND INSTALLATION IJ
TACTICAL COMM TECHNICIAN IJ	GENERAL COMPUTER AND SWITCHING MAINTENANCE CLUSTER - Tactical/Mobile Operations Job	CRYPTOGRAPHIC AND TELECOMMUNICATIONS CLUSTER - Mobile Tactical Technician Job
TACTICAL SWITCH MAINTENANCE IJ	COMBAT COMMUNICATIONS CLUSTER - Telephone Switch Maintenance Job	*
COMPUTER, NETWORK, SWITCHING AND CRYPTOGRAPHIC (CNSC) IJ	GENERAL COMPUTER AND SWITCHING MAINTENANCE CLUSTER	*
STRATCOM MAINTENANCE TECHNICIAN IJ	GENERAL COMPUTER AND SWITCHING MAINTENANCE CLUSTER - STRATCOM Technician Job	*
CRYPTO MAINTENANCE TECHNICIAN IJ	*	CRYPTOGRAPHIC AND TELECOMMUNICATIONS CLUSTER - Secure Communications Technician Job
SECURE TELEPHONE SWITCH TECHNICIAN IJ	*	*
*	HEADQUARTERS STAFF NCO IJ	MANAGEMENT/STAFF CLUSTER - Superintendent Job

* Indicates cluster/job not found in study

TABLE 20 (CONTINUED)
SPECIALTY JOB COMPARISON BETWEEN CURRENT AND 1998 SURVEYS

PRESENT SURVEY (N=1,636)	1998 SURVEY ELECTRONIC COMPUTER AND SWITCHING SYSTEMS (N=1,929)	1998 SURVEY SECURE COMMUNICATIONS SYSTEMS (N=1,155)
*	COMBAT COMMUNICATIONS CLUSTER - Combat Communications NCOIC Job	*
*	GENERAL COMPUTER AND SWITCHING MAINTENANCE CLUSTER - General Troubleshooting Job	*
*	*	
*	*	SAFETY/SECURITY MANAGEMENT IJ
*	*	MANAGEMENT/STAFF CLUSTER - Mobile/Tactical Management Job
*	*	CRYPTOGRAPHIC AND TELECOMMUNICATIONS CLUSTER - COMSEC Control Job - Depot Maintenance Job - Red Switch Technician Job - Line Supervision Job

* Indicates cluster/job not found in study

TABLE 21

DISTRIBUTION OF AFSC 2E2X1 SKILL-LEVEL MEMBERS
ACROSS CAREER LADDER JOBS (PERCENT IN EACH JOB)

	2E231 (N=156)	2E251 (N=833)	2E271 (N=619)	2E291 (N=26)
MANAGEMENT CLUSTER	2	10	26	85
GENERAL COMPUTER, NETWORK, AND PERIPHERAL EQUIPMENT CLUSTER	17	22	18	0
JOINT SURVEILLANCE SYSTEM INDEPENDENT JOB	3	4	2	0
COMPUTER SWITCH MAINTENANCE INDEPENDENT JOB	3	1	1	0
AIRCRAFT COMPUTER MAINTAINER INDEPENDENT JOB	5	2	1	0
INTEL E&I INDEPENDENT JOB	1	1	0	0
TACTICAL COMM TECHNICIAN INDEPENDENT JOB	2	1	1	0
TACTICAL SWITCH MAINTENANCE INDEPENDENT JOB	1	1	0	0
CNSC INDEPENDENT JOB	13	20	29	4
STRATCOM MAINTENANCE TECHNICIAN INDEPENDENT JOB	4	1	0	0
CRYPTO MAINTENANCE TECHNICIAN INDEPENDENT JOB	14	3	2	0
SECURE TELEPHONE SWITCH TECHNICIAN INDEPENDENT JOB	0	0	1	0
NOT GROUPED	35	33	19	11

Columns may not add up to 100 due to rounding

TABLE 22

TIME SPENT ON DUTIES BY MEMBERS OF AFSC 2E2X1 SKILL-LEVEL GROUPS
(PERCENT RESPONDING)

DUTIES	2E231 (N=156)	2E251 (N=833)	2E271 (N=619)	2E291 (N=26)
A PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC MAINTENANCE ACTIVITIES	26	25	20	7
B PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE MAINTENANCE INSPECTION (PMI) ACTIVITIES	15	13	9	1
C REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC EQUIPMENT OR COMPONENTS	7	6	5	1
D MAINTAINING CABLES, WIRING, AND ASSOCIATED EQUIPMENT	9	8	6	2
E MAINTAINING COMPUTERS, NETWORK, AND PERIPHERAL EQUIPMENT	7	9	7	*
F MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM) EQUIPMENT	3	2	1	*
G MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL EQUIPMENT	*	*	*	0
H MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYPEWRITER (TRTT) EQUIPMENT	*	*	*	0
I MAINTAINING AN/UGC-141-SERIES FIXED-RECORD COMMUNICATIONS TELETYPEWRITER (FRCT) EQUIPMENT	*	*	*	0
J MAINTAINING AN/UGC-144 COMMUNICATIONS TERMINALS	*	*	*	*
K MAINTAINING AN/UYK-83A/85A TACTICAL COMPUTERS	0	*	*	0
L MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMENT	6	4	3	*
M MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT	2	1	1	*
N MAINTAINING MODEM, ANALOG SERVICE UNIT (ASU), CHANNEL SERVICE UNIT (CSU), AND DATA SERVICE UNIT (DSU) EQUIPMENT	1	1	1	1
O MAINTAINING MULTIPLEXERS	1	1	1	*
P MAINTAINING CRYPTOGRAPHIC ANCILLARY EQUIPMENT	4	3	2	*
Q MAINTAINING SECURE DIGITAL SWITCHES	*	*	*	0
R PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	3	3	3	2
S PERFORMING OPERATOR ACTIVITIES	2	2	1	*
T PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	2	3	3	4
U PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	3	3	5	9
V PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	3	3	3	5
W PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	2	3	4	5
X PERFORMING TRAINING ACTIVITIES	2	4	7	7
Y PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	2	8	19	56

* Indicates less than 1%

Columns may not add up to 100 due to rounding

TABLE 23

TIME SPENT ON DUTIES BY AD MEMBERS OF AFSC 2E2X1 SKILL-LEVEL GROUPS
(PERCENT RESPONDING)

DUTIES	AD 2E231 (N=155)	AD 2E251 (N=565)	AD 2E271 (N=315)	AD 2E291 (N=19)
A PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC MAINTENANCE ACTIVITIES	26	22	14	3
B PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE MAINTENANCE INSPECTION (PMI) ACTIVITIES	15	11	6	0
C REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC EQUIPMENT OR COMPONENTS	7	5	2	*
D MAINTAINING CABLES, WIRING, AND ASSOCIATED EQUIPMENT	9	7	3	2
E MAINTAINING COMPUTERS, NETWORK, AND PERIPHERAL EQUIPMENT	7	7	5	*
F MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM) EQUIPMENT	3	2	*	0
G MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL EQUIPMENT	*	*	*	0
H MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYPEWRITER (TRITT) EQUIPMENT	*	*	*	0
I MAINTAINING AN/UGC-141-SERIES FIXED-RECORD COMMUNICATIONS TELETYPEWRITER (FRCT) EQUIPMENT	*	*	0	0
J MAINTAINING AN/UGC-144 COMMUNICATIONS TERMINALS	*	*	*	0
K MAINTAINING AN/UYK-83A/85A TACTICAL COMPUTERS	*	*	0	0
L MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMENT	6	4	2	0
M MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT	2	1	*	0
N MAINTAINING MODEM, ANALOG SERVICE UNIT (ASU), CHANNEL SERVICE UNIT (CSU), AND DATA SERVICE UNIT (DSU) EQUIPMENT	1	1	1	1
O MAINTAINING MULTIPLEXERS	1	1	*	0
P MAINTAINING CRYPTOGRAPHIC ANCILLARY EQUIPMENT	4	3	1	*
Q MAINTAINING SECURE DIGITAL SWITCHES	*	*	*	0
R PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	3	3	3	2
S PERFORMING OPERATOR ACTIVITIES	2	1	1	*
T PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	2	4	4	3
U PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	3	4	8	9
V PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	3	3	4	4
W PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	2	3	4	5
X PERFORMING TRAINING ACTIVITIES	2	6	9	5
Y PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	2	11	31	63

* Indicates less than 1%

Columns may not add up to 100 due to rounding

TABLE 24

REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E231 PERSONNEL

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 136	PERCENT MEMBERS PERFORMING (N=155)
A0118	Perform general electrostatic discharge (ESD) procedures	63
A0024	Clean facilities	59
A0079	Operationally check cryptographic equipment	58
A0116	Perform equipment power-up or power-down procedures	57
V1242	Inventory equipment, tools, parts, or supplies	54
A0053	Inspect cables for corrosion	54
D0452	Isolate malfunctions to cables	52
A0034	Connect or disconnect power, power panels, or equipment leads	52
A0063	Isolate system malfunctions to major system components	50
B0218	Isolate cryptographic equipment malfunctions	50
L0853	Operationally check KG-84-series equipment	50
C0371	Remove or replace cryptographic equipment	50
C0409	Remove or replace power supplies	49
L0938	Remove or replace KG-84-series equipment	49
A0001	Analyze equipment outages or malfunction reports	48
A0098	Operationally check printers	48
A0049	Inspect batteries for corrosion	47
A0046	Fabricate support items, cables, or connectors	46
L0808	Isolate KG-84-series malfunctions	46
A0146	Remove or replace wiring	46
A0127	Perform strapping options on equipment	46
A0036	Coordinate equipment or system repairs with technical controllers	45
X1293	Conduct on-the-job training (OJT)	45
C0390	Remove or replace keyboards	45
P1064	Load variables using KYK-13s	45
A0112	Perform corrosion control procedures on equipment or supplies	45
A0054	Inspect communications-electronics (C-E) equipment for physical damages	45
B0267	Isolate malfunctions to cryptographic equipment	44
C0386	Remove or replace fuses	44
C0361	Remove or replace batteries	44
V1246	Pick up, deliver, or store equipment, tools, parts, or supplies	43
C0410	Remove or replace printers	43
A0087	Operationally check keyboards	42
A0011	Bench check cryptographic equipment	41
A0097	Operationally check power supplies	41
A0038	Coordinate systems operation with distant stations to verify equipment operation	40
S1188	Load cryptographic variables	40
B0239	Isolate power supply malfunctions	40
L0837	Load variables to KG-type cryptographic equipment	40
P1059	Load variables using KOI-18s	39
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers	39
B0240	Isolate printer malfunctions	39
B0301	Isolate malfunctions to power supplies	39

TABLE 25

REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E251 PERSONNEL

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 129	PERCENT MEMBERS PERFORMING (N=565)
X1293	Conduct on-the-job training (OJT)	58
A0116	Perform equipment power-up or power-down procedures	57
A0118	Perform general electrostatic discharge (ESD) procedures	56
V1242	Inventory equipment, tools, parts, or supplies	54
A0024	Clean facilities	53
A0079	Operationally check cryptographic equipment	49
A0054	Inspect communications-electronics (C-E) equipment for physical damages	49
D0452	Isolate malfunctions to cables	48
A0046	Fabricate support items, cables, or connectors	47
A0063	Isolate system malfunctions to major system components	47
A0001	Analyze equipment outages or malfunction reports	45
X1305	Maintain training records or files	45
A0034	Connect or disconnect power, power panels, or equipment leads	45
V1246	Pick up, deliver, or store equipment, tools, parts, or supplies	44
C0390	Remove or replace keyboards	44
X1294	Counsel trainees on training progress	43
A0098	Operationally check printers	43
C0410	Remove or replace printers	43
V1239	Evaluate serviceability of equipment, tools, parts, or supplies	41
E0563	Operationally check printers	41
A0087	Operationally check keyboards	40
A0089	Operationally check LAN components, such as routers, servers, hubs, network interface controllers (NICs), or workstations	39
Y1318	Counsel subordinates concerning personal matters	39
E0550	Isolate printer malfunctions	38
A0146	Remove or replace wiring	38
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or workstations	37
Y1315	Conduct supervisory performance feedback sessions	37
Y1343	Inspect personnel for compliance with military standards	37
B0303	Isolate malfunctions to printers	37
T1213	Update personnel data files in CAMS, GO81, or access generated databases	36
X1295	Determine training requirements	36
P1064	Load variables using KYK-13s	36
X1303	Evaluate progress of trainees	35
T1214	Update workcenter training reports in CAMS, GO81, or access generated databases	35
Y1337	Evaluate personnel for compliance with performance standards	34
A0088	Operationally check local area networks (LANs)	34
B0207	Discriminate between hardware and software failures	34
C0379	Remove or replace electronic circuit cards or printed circuit boards (PCBs)	34
A0038	Coordinate systems operation with distant stations to verify equipment operation	34
E0562	Operationally check NICs	33
Y1356	Write recommendations for awards or decorations	33
E0544	Isolate desktop computer malfunctions	32

TABLE 26

REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E271 PERSONNEL

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 128	PERCENT MEMBERS PERFORMING (N=315)
Y1356	Write recommendations for awards or decorations	73
Y1355	Write or indorse military performance reports	68
Y1318	Counsel subordinates concerning personal matters	68
Y1320	Determine or establish work assignments or priorities	64
Y1343	Inspect personnel for compliance with military standards	64
Y1344	Interpret policies, directives, or procedures for subordinates	63
Y1337	Evaluate personnel for compliance with performance standards	62
Y1315	Conduct supervisory performance feedback sessions	62
Y1350	Schedule personnel for TDY assignments, leaves, or passes	61
X1293	Conduct on-the-job training (OJT)	60
Y1357	Write replies to inspection reports	59
X1295	Determine training requirements	58
Y1317	Conduct supervisory orientations for newly assigned personnel	58
U1226	Maintain administrative files	57
Y1326	Develop or establish work schedules	57
Y1333	Establish performance standards for subordinates	57
X1294	Counsel trainees on training progress	57
Y1338	Evaluate personnel for promotion, demotion, reclassification, or special awards	56
Y1342	Initiate actions required due to substandard performance of personnel	56
Y1312	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	55
Y1313	Conduct self-inspections or self-assessments	55
Y1319	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	55
X1290	Brief personnel concerning training programs or matters	54
X1303	Evaluate progress of trainees	54
A0001	Analyze equipment outages or malfunction reports	54
Y1310	Assign personnel to work areas or duty positions	53
X1305	Maintain training records or files	52
Y1340	Implement safety or security programs	50
Y1325	Develop or establish work methods or procedures	50
X1297	Develop training programs, plans, or procedures	49
Y1352	Write job or position descriptions	49
V1242	Inventory equipment, tools, parts, or supplies	49
Y1335	Evaluate inspection report findings or inspection procedures	48
U1235	Write minutes of briefings, conferences, or meetings	47
Y1327	Dispatch crews to work projects	47
Y1339	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	47
U1224	Initiate or maintain standby rosters or workcenter pyramid recall rosters	46
V1239	Evaluate serviceability of equipment, tools, parts, or supplies	46
Y1349	Review drafts of supplements or changes to directives, such as policy directives, instructions, or manuals	45
Y1347	Review budget requirements	45
Y1316	Conduct safety inspections of equipment or facilities	44

TABLE 27

REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 2E291 PERSONNEL

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 45	PERCENT MEMBERS PERFORMING (N=19)
Y1312	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	84
Y1319	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	79
Y1344	Interpret policies, directives, or procedures for subordinates	79
Y1356	Write recommendations for awards or decorations	79
Y1318	Counsel subordinates concerning personal matters	79
Y1349	Review drafts of supplements or changes to directives, such as policy directives, instructions, or manuals	74
Y1337	Evaluate personnel for compliance with performance standards	74
Y1357	Write replies to inspection reports	74
Y1315	Conduct supervisory performance feedback sessions	74
Y1350	Schedule personnel for TDY assignments, leaves, or passes	74
Y1338	Evaluate personnel for promotion, demotion, reclassification, or special awards	68
Y1347	Review budget requirements	68
Y1310	Assign personnel to work areas or duty positions	68
Y1355	Write or indorse military performance reports	63
Y1343	Inspect personnel for compliance with military standards	63
Y1320	Determine or establish work assignments or priorities	63
Y1328	Draft budget requirements	63
Y1352	Write job or position descriptions	63
Y1335	Evaluate inspection report findings or inspection procedures	63
Y1331	Establish organizational policies, such as operating instructions (OIs) or standard operating procedures (SOPs)	58
Y1333	Establish performance standards for subordinates	58
Y1325	Develop or establish work methods or procedures	58
Y1353	Write staff studies, surveys, or routine reports, other than training or inspection reports	53
V1240	Identify and report equipment or supply problems	53
U1226	Maintain administrative files	53
Y1339	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	53
Y1336	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	53
Y1351	Write inspection reports	47
X1290	Brief personnel concerning training programs or matters	47
X1302	Evaluate effectiveness of training programs, plans, or procedures	42
Y1329	Draft host-tenant or interservice agreements	37
Y1330	Draft supplements or changes to directives, such as policy directives, instructions, or manuals	32
Y1312	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	84
Y1319	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	79
Y1344	Interpret policies, directives, or procedures for subordinates	79
Y1356	Write recommendations for awards or decorations	79
Y1318	Counsel subordinates concerning personal matters	79
Y1349	Review drafts of supplements or changes to directives, such as policy directives, instructions, or manuals	74

TABLE 28

TIME SPENT ON DUTIES BY ANG MEMBERS OF AFSC 2E2X1 SKILL-LEVEL GROUPS
(PERCENT RESPONDING)

DUTIES	ANG 2E251 (N=231)	ANG 2E271 (N=259)	ANG 2E291 (N=7)
A PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC MAINTENANCE ACTIVITIES	31	26	16
B PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE MAINTENANCE INSPECTION (PMI) ACTIVITIES	17	13	5
C REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC EQUIPMENT OR COMPONENTS	8	7	2
D MAINTAINING CABLES, WIRING, AND ASSOCIATED EQUIPMENT	10	9	1
E MAINTAINING COMPUTERS, NETWORK, AND PERIPHERAL EQUIPMENT	10	9	1
F MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM) EQUIPMENT	2	1	*
G MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL EQUIPMENT	*	*	0
H MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYPEWRITER (TRTT) EQUIPMENT	*	*	0
I MAINTAINING AN/UGC-141-SERIES FIXED-RECORD COMMUNICATIONS TELETYPEWRITER (FRCT) EQUIPMENT	*	*	0
J MAINTAINING AN/UGC-144 COMMUNICATIONS TERMINALS	*	1	*
K MAINTAINING AN/UYK-83A/85A TACTICAL COMPUTERS	*	*	0
L MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMENT	3	3	*
M MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT	1	1	*
N MAINTAINING MODEM, ANALOG SERVICE UNIT (ASU), CHANNEL SERVICE UNIT (CSU), AND DATA SERVICE UNIT (DSU) EQUIPMENT	1	1	0
O MAINTAINING MULTIPLEXERS	1	1	*
P MAINTAINING CRYPTOGRAPHIC ANCILLARY EQUIPMENT	2	3	0
Q MAINTAINING SECURE DIGITAL SWITCHES	*	*	0
R PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	3	3	*
S PERFORMING OPERATOR ACTIVITIES	2	1	*
T PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	1	2	6
U PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	1	2	7
V PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2	2	6
W PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	2	4	6
X PERFORMING TRAINING ACTIVITIES	1	4	12
Y PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1	6	37

* Indicates less than 1%

Columns may not add up to 100 due to rounding

TABLE 29

REPRESENTATIVE TASKS PERFORMED BY ANG DAFSC 2E251 PERSONNEL

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 159	PERCENT MEMBERS PERFORMING (N=231)
C0390	Remove or replace keyboards	71
A0087	Operationally check keyboards	68
A0098	Operationally check printers	67
A0024	Clean facilities	66
A0116	Perform equipment power-up or power-down procedures	65
A0034	Connect or disconnect power, power panels, or equipment leads	65
A0097	Operationally check power supplies	64
C0410	Remove or replace printers	62
E0563	Operationally check printers	61
A0053	Inspect cables for corrosion	61
A0063	Isolate system malfunctions to major system components	60
A0054	Inspect communications-electronics (C-E) equipment for physical damages	60
C0409	Remove or replace power supplies	60
A0118	Perform general electrostatic discharge (ESD) procedures	58
A0001	Analyze equipment outages or malfunction reports	57
C0379	Remove or replace electronic circuit cards or printed circuit boards (PCBs)	56
B0239	Isolate power supply malfunctions	56
A0146	Remove or replace wiring	56
B0285	Isolate malfunctions to keyboards	55
D0452	Isolate malfunctions to cables	54
E0550	Isolate printer malfunctions	53
B0303	Isolate malfunctions to printers	53
A0046	Fabricate support items, cables, or connectors	52
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers	52
A0083	Operationally check display equipment	52
E0557	Operationally check desktop computers	51
A0089	Operationally check LAN components, such as routers, servers, hubs, network interface controllers (NICs), or workstations	51
A0015	Bench check keyboards	51
A0099	Operationally check processors	51
B0240	Isolate printer malfunctions	51
E0544	Isolate desktop computer malfunctions	50
A0020	Bench check power supplies	50
V1242	Inventory equipment, tools, parts, or supplies	50
E0571	Remove or replace desktop computer subassemblies	48
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or workstations	48
A0088	Operationally check local area networks (LANs)	48
E0560	Operationally check laptop computers	48
B0301	Isolate malfunctions to power supplies	48
A0142	Remove or replace fan or blower assemblies	48
C0398	Remove or replace mouse devices	48
C0361	Remove or replace batteries	47
A0021	Bench check printers	46

TABLE 30

REPRESENTATIVE TASKS PERFORMED BY ANG DAFSC 2E271 PERSONNEL

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 208	PERCENT MEMBERS PERFORMING (N=259)
X1293	Conduct on-the-job training (OJT)	64
A0098	Operationally check printers	64
A0024	Clean facilities	62
C0390	Remove or replace keyboards	56
A0087	Operationally check keyboards	56
A0054	Inspect communications-electronics (C-E) equipment for physical damages	56
A0116	Perform equipment power-up or power-down procedures	56
C0410	Remove or replace printers	56
E0563	Operationally check printers	53
A0063	Isolate system malfunctions to major system components	53
C0409	Remove or replace power supplies	53
A0097	Operationally check power supplies	53
V1242	Inventory equipment, tools, parts, or supplies	51
A0046	Fabricate support items, cables, or connectors	51
A0146	Remove or replace wiring	51
A0053	Inspect cables for corrosion	51
E0550	Isolate printer malfunctions	49
A0034	Connect or disconnect power, power panels, or equipment leads	49
A0001	Analyze equipment outages or malfunction reports	49
A0118	Perform general electrostatic discharge (ESD) procedures	47
D0452	Isolate malfunctions to cables	47
A0089	Operationally check LAN components, such as routers, servers, hubs, network interface controllers (NICs), or workstations	47
B0240	Isolate printer malfunctions	47
X1305	Maintain training records or files	47
A0021	Bench check printers	44
A0079	Operationally check cryptographic equipment	44
A0015	Bench check keyboards	42
W1288	Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	42
C0379	Remove or replace electronic circuit cards or printed circuit boards (PCBs)	42
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers	42
B0303	Isolate malfunctions to printers	42
A0088	Operationally check local area networks (LANs)	42
E0544	Isolate desktop computer malfunctions	42
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or workstations	64
A0160	Test circuits for grounds, opens, or shorts	64
A0020	Bench check power supplies	62
A0049	Inspect batteries for corrosion	56
C0398	Remove or replace mouse devices	56
E0557	Operationally check desktop computers	56
A0083	Operationally check display equipment	56
E0560	Operationally check laptop computers	56
W1262	Don or doff chemical warfare personal protective clothing	53
X1293	Conduct on-the-job training (OJT)	53

TABLE 31

REPRESENTATIVE TASKS PERFORMED BY ANG DAFSC 2E291 PERSONNEL

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 114	PERCENT MEMBERS PERFORMING (N=7)
Y1312	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	86
Y1333	Establish performance standards for subordinates	86
Y1337	Evaluate personnel for compliance with performance standards	86
Y1338	Evaluate personnel for promotion, demotion, reclassification, or special awards	71
Y1315	Conduct supervisory performance feedback sessions	71
A0166	Verify authorized modifications of C-E equipment	71
Y1320	Determine or establish work assignments or priorities	71
Y1341	Initiate personnel action requests	71
X1302	Evaluate effectiveness of training programs, plans, or procedures	71
Y1318	Counsel subordinates concerning personal matters	71
V1240	Identify and report equipment or supply problems	71
Y1310	Assign personnel to work areas or duty positions	71
Y1343	Inspect personnel for compliance with military standards	71
X1293	Conduct on-the-job training (OJT)	71
Y1350	Schedule personnel for TDY assignments, leaves, or passes	71
X1295	Determine training requirements	71
Y1356	Write recommendations for awards or decorations	71
Y1339	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	71
X1294	Counsel trainees on training progress	71
Y1357	Write replies to inspection reports	71
X1290	Brief personnel concerning training programs or matters	71
A0071	Monitor circuit operations	71
Y1331	Establish organizational policies, such as operating instructions (OIs) or standard operating procedures (SOPs)	57
A0035	Coordinate dispatches with maintenance control	57
X1297	Develop training programs, plans, or procedures	57
X1306	Personalize lesson plans	57
Y1344	Interpret policies, directives, or procedures for subordinates	57
Y1352	Write job or position descriptions	57
T1199	Adjust daily maintenance plans to meet operational commitments	57
Y1327	Dispatch crews to work projects	57
U1224	Initiate or maintain standby rosters or workcenter pyramid recall rosters	57
Y1355	Write or indorse military performance reports	57
V1237	Coordinate maintenance of equipment with on-base agencies	57
V1245	Maintain organizational equipment or supply records	57
U1226	Maintain administrative files	57
V1238	Develop equipment checklists	57
U1225	Initiate requests for temporary duty (TDY) orders	57
Y1326	Develop or establish work schedules	57
A0001	Analyze equipment outages or malfunction reports	57
Y1336	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	57
X1299	Develop or procure training materials or aids	57
T1200	Analyze core automated maintenance system (CAMS), GO81, or access generated data	57
Y1335	Evaluate inspection report findings or inspection procedures	57

TABLE 32

TIME SPENT ON DUTIES BY AFRC MEMBERS OF AFSC 2E2X1 SKILL-LEVEL GROUPS
(PERCENT RESPONDING)

<u>DUTIES</u>	<u>AFRC 2E251 (N=37)</u>	<u>AFRC 2E271 (N=45)</u>
A PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC MAINTENANCE ACTIVITIES	27	25
B PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE MAINTENANCE INSPECTION (PMI) ACTIVITIES	12	10
C REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC EQUIPMENT OR COMPONENTS	7	6
D MAINTAINING CABLES, WIRING, AND ASSOCIATED EQUIPMENT	7	8
E MAINTAINING COMPUTERS, NETWORK, AND PERIPHERAL EQUIPMENT	23	14
F MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM) EQUIPMENT	2	2
G MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL EQUIPMENT	*	0
H MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYPEWRITER (TRTT) EQUIPMENT	*	*
I MAINTAINING AN/UGC-141-SERIES FIXED-RECORD COMMUNICATIONS TELETYPEWRITER (FRCT) EQUIPMENT	*	*
J MAINTAINING AN/UGC-144 COMMUNICATIONS TERMINALS	*	*
K MAINTAINING AN/UYK-83A/85A TACTICAL COMPUTERS	*	*
L MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMENT	1	0
M MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT	*	*
N MAINTAINING MODEM, ANALOG SERVICE UNIT (ASU), CHANNEL SERVICE UNIT (CSU), AND DATA SERVICE UNIT (DSU) EQUIPMENT	1	0
O MAINTAINING MULTIPLEXERS	*	0
P MAINTAINING CRYPTOGRAPHIC ANCILLARY EQUIPMENT	1	*
Q MAINTAINING SECURE DIGITAL SWITCHES	*	*
R PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	3	2
S PERFORMING OPERATOR ACTIVITIES	2	0
T PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	1	2
U PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	1	2
V PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2	3
W PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	3	6
X PERFORMING TRAINING ACTIVITIES	2	9
Y PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	3	9

*Indicates less than 1%

Columns may not add up to 100 due to rounding

TABLE 33

REPRESENTATIVE TASKS PERFORMED BY AFRC DAFSC 2E251 PERSONNEL

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 85	PERCENT MEMBERS PERFORMING (N=37)
E0563	Operationally check printers	70
E0550	Isolate printer malfunctions	62
C0390	Remove or replace keyboards	62
A0098	Operationally check printers	59
E0560	Operationally check laptop computers	57
E0562	Operationally check NICs	54
A0087	Operationally check keyboards	54
E0557	Operationally check desktop computers	51
E0544	Isolate desktop computer malfunctions	51
E0547	Isolate laptop computer malfunctions	46
A0089	Operationally check LAN components, such as routers, servers, hubs, network interface controllers (NICs), or workstations	43
E0570	Remove and replace NICs	43
A0088	Operationally check local area networks (LANs)	41
A0001	Analyze equipment outages or malfunction reports	41
E0571	Remove or replace desktop computer subassemblies	41
E0549	Isolate NIC malfunctions	41
B0301	Isolate malfunctions to power supplies	41
E0576	Remove or replace printer subassemblies	41
C0398	Remove or replace mouse devices	41
A0054	Inspect communications-electronics (C-E) equipment for physical damages	38
B0303	Isolate malfunctions to printers	38
R1157	Install printers	38
C0410	Remove or replace printers	38
A0034	Connect or disconnect power, power panels, or equipment leads	35
E0568	Operationally check servers	35
A0097	Operationally check power supplies	35
E0546	Isolate hub malfunctions	35
C0409	Remove or replace power supplies	35
A0024	Clean facilities	32
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or workstations	32
E0565	Operationally check routers	32
A0116	Perform equipment power-up or power-down procedures	32
A0083	Operationally check display equipment	32
B0239	Isolate power supply malfunctions	32
E0559	Operationally check hubs	32
E0578	Remove or replace routers	32
B0285	Isolate malfunctions to keyboards	32
R1172	Perform pre-deployment actions	32
B0240	Isolate printer malfunctions	32
S1180	Configure workstations	30
A0053	Inspect cables for corrosion	30
V1242	Inventory equipment, tools, parts, or supplies	30
E0563	Operationally check printers	70

TABLE 34

REPRESENTATIVE TASKS PERFORMED BY AFRC DAFSC 2E271 PERSONNEL

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 104	PERCENT MEMBERS PERFORMING (N=45)
E0563	Operationally check printers	64
A0098	Operationally check printers	64
E0544	Isolate desktop computer malfunctions	62
A0024	Clean facilities	56
X1305	Maintain training records or files	56
E0550	Isolate printer malfunctions	56
X1294	Counsel trainees on training progress	56
A0087	Operationally check keyboards	56
E0557	Operationally check desktop computers	53
E0571	Remove or replace desktop computer subassemblies	53
A0054	Inspect communications-electronics (C-E) equipment for physical damages	53
C0390	Remove or replace keyboards	53
E0560	Operationally check laptop computers	51
W1262	Don or doff chemical warfare personal protective clothing	51
W1288	Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	51
C0410	Remove or replace printers	51
X1293	Conduct on-the-job training (OJT)	49
A0116	Perform equipment power-up or power-down procedures	49
B0303	Isolate malfunctions to printers	49
E0547	Isolate laptop computer malfunctions	47
B0285	Isolate malfunctions to keyboards	47
D0533	Terminate cables with punch-down devices	47
A0046	Fabricate support items, cables, or connectors	47
A0088	Operationally check local area networks (LANs)	47
E0549	Isolate NIC malfunctions	44
A0083	Operationally check display equipment	44
A0015	Bench check keyboards	42
X1303	Evaluate progress of trainees	42
X1290	Brief personnel concerning training programs or matters	42
X1295	Determine training requirements	42
A0089	Operationally check LAN components, such as routers, servers, hubs, network interface controllers (NICs), or workstations	42
A0097	Operationally check power supplies	42
D0452	Isolate malfunctions to cables	42
A0021	Bench check printers	40
W1265	Inspect mobility bags or kits	40
E0570	Remove and replace NICs	40
Y1356	Write recommendations for awards or decorations	40
E0559	Operationally check hubs	40
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers	40
Y1318	Counsel subordinates concerning personal matters	40
B0286	Isolate malfunctions to LAN components, such as routers, servers, hubs, NICs, or workstations	38
V1246	Pick up, deliver, or store equipment, tools, parts, or supplies	38
E0563	Operationally check printers	64

TABLE 35

PERCENT TIME SPENT ON DUTIES BY
FIRST-ENLISTMENT PERSONNEL (1-48 MONTHS' TAFMS)

DUTIES	1-48 MONTHS' TAFMS (N=257)
A PERFORMING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC MAINTENANCE ACTIVITIES	26
B PERFORMING GENERAL ALIGNMENT, FAULT ISOLATION, AND PREVENTIVE MAINTENANCE INSPECTION (PMI) ACTIVITIES	15
C REMOVING OR REPLACING GENERAL COMPUTER, NETWORK, SWITCHING, AND CRYPTOGRAPHIC EQUIPMENT OR COMPONENTS	7
D MAINTAINING CABLES, WIRING, AND ASSOCIATED EQUIPMENT	9
E MAINTAINING COMPUTERS, NETWORK, AND PERIPHERAL EQUIPMENT	9
F MAINTAINING STRATEGIC COMMUNICATIONS (STRATCOM) EQUIPMENT	3
G MAINTAINING AN/UGC-74 COMMUNICATIONS TERMINAL EQUIPMENT	*
H MAINTAINING AN/UGC-129 TACTICAL RECORD TRAFFIC TELETYPEWRITER (TRTT) EQUIPMENT	*
I MAINTAINING AN/UGC-141-SERIES FIXED-RECORD COMMUNICATIONS TELETYPEWRITER (FRCT) EQUIPMENT	*
J MAINTAINING AN/UGC-144 COMMUNICATIONS TERMINALS	*
K MAINTAINING AN/UYK-83A/85A TACTICAL COMPUTERS	*
L MAINTAINING KG-TYPE OR KI-TYPE CRYPTOGRAPHIC EQUIPMENT	5
M MAINTAINING KY-TYPE CRYPTOGRAPHIC EQUIPMENT	1
N MAINTAINING MODEM, ANALOG SERVICE UNIT (ASU), CHANNEL SERVICE UNIT (CSU), AND DATA SERVICE UNIT (DSU) EQUIPMENT	1
O MAINTAINING MULTIPLEXERS	1
P MAINTAINING CRYPTOGRAPHIC ANCILLARY EQUIPMENT	3
Q MAINTAINING SECURE DIGITAL SWITCHES	*
R PERFORMING ENGINEERING AND INSTALLATION ACTIVITIES	3
S PERFORMING OPERATOR ACTIVITIES	2
T PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	2
U PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	3
V PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	3
W PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	2
X PERFORMING TRAINING ACTIVITIES	2
Y PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	2

* Indicates less than 1%

Columns may not add up to 100 due to rounding

TABLE 36

REPRESENTATIVE TASKS PERFORMED BY AFSC 2E2X1
FIRST-ENLISTMENT PERSONNEL (1-48 MONTHS' TAFMS)

TASKS	AVERAGE NUMBER OF TASKS PERFORMED	PERCENT MEMBERS PERFORMING (N=257)
A0118	Perform general electrostatic discharge (ESD) procedures	61
A0024	Clean facilities	58
A0116	Perform equipment power-up or power-down procedures	58
A0079	Operationally check cryptographic equipment	53
A0053	Inspect cables for corrosion	53
A0034	Connect or disconnect power, power panels, or equipment leads	52
C0390	Remove or replace keyboards	51
D0452	Isolate malfunctions to cables	51
V1242	Inventory equipment, tools, parts, or supplies	50
A0098	Operationally check printers	50
A0063	Isolate system malfunctions to major system components	49
C0409	Remove or replace power supplies	49
A0001	Analyze equipment outages or malfunction reports	47
C0410	Remove or replace printers	47
A0046	Fabricate support items, cables, or connectors	46
A0087	Operationally check keyboards	46
C0371	Remove or replace cryptographic equipment	46
A0146	Remove or replace wiring	45
L0853	Operationally check KG-84-series equipment	44
A0097	Operationally check power supplies	44
A0054	Inspect communications-electronics (C-E) equipment for physical damages	44
X1293	Conduct on-the-job training (OJT)	43
A0049	Inspect batteries for corrosion	43
V1246	Pick up, deliver, or store equipment, tools, parts, or supplies	42
B0218	Isolate cryptographic equipment malfunctions	42
L0938	Remove or replace KG-84-series equipment	42
B0301	Isolate malfunctions to power supplies	41
L0808	Isolate KG-84-series malfunctions	41
A0142	Remove or replace fan or blower assemblies	41
A0089	Operationally check LAN components, such as routers, servers, hubs, network interface controllers (NICs), or workstations	40
A0127	Perform strapping options on equipment	40
C0386	Remove or replace fuses	40
A0036	Coordinate equipment or system repairs with technical controllers	39
E0563	Operationally check printers	39
B0267	Isolate malfunctions to cryptographic equipment	39
B0240	Isolate printer malfunctions	39
B0303	Isolate malfunctions to printers	39
P1064	Load variables using KYK-13s	38
C0379	Remove or replace electronic circuit cards or printed circuit boards (PCBs)	37
C0403	Remove or replace nonelectrical hardware, such as screws, nuts, ejectors, or covers	37
A0064	Isolate system malfunctions to transmission lines	37
A0011	Bench check cryptographic equipment	37

TABLE 37

TEST EQUIPMENT USED OR OPERATED BY
20 PERCENT OR MORE FIRST-ENLISTMENT AFSC 2E2X1 PERSONNEL
(PERCENT USING OR OPERATING)

TEST EQUIPMENT	(N=257)
Multimeters	62
Digital Voltmeters	56
Cable Testers	52
Oscilloscopes, Digital	51
Oscilloscopes, Analog	37
Loop Back Plugs	32
Fiber Optic Test Sets	30
Torque Wrenches	30
Laptop Computers	29
Network Analyzers	23

TABLE 38

CRYPTOGRAPHIC EQUIPMENT USED OR MAINTAINED BY
20 PERCENT OR MORE FIRST-ENLISTMENT AFSC 2E2X1 PERSONNEL
(PERCENT USING OR MAINTAINING)

CRYPTOGRAPHIC EQUIPMENT	(N=257)
KG-84 series	59
KOI-18s	43
KG-94 series	42
KYK-13s	41
KIV-7 series	35
KG-194 series	33
CYZ-10s	27
KY-58	21
KYK-15s	20

TABLE 39

ANCILLARY EQUIPMENT USED OR MAINTAINED BY
20 PERCENT OR MORE FIRST-ENLISTMENT AFSC 2E2X1 PERSONNEL
(PERCENT USING OR MAINTAINING)

ANCILLARY EQUIPMENT	(N=257)
STU III Telephones	44
Power Supplies	37
Modems, Digital	29
Modems, Fiber Optic	29
Routers	27
Switches, Ethernet	25
Network Interface Controllers (NICs)	24
Secure Telephone Equipment (STE)	24
Hubs	23

TABLE 40

AFSC 2E2X1 TASKS WITH HIGHEST TRAINING EMPHASIS RATINGS

TASKS	TNG EMP	PERCENT MEMBERS PERFORMING				TSK DIF
		1-24		1-48		
		TAFMS	MOS	TAFMS	MOS	
A0063	6.01	40	49	49	6.16	
A0089	5.80	24	40	40	6.23	
Isolate system malfunctions to major system components						
Operationally check LAN components, such as routers, servers, hubs, network interface controllers (NICs), or workstations						
A0079	5.67	52	53	53	4.53	
A0088	5.66	24	33	33	5.40	
B0218	5.42	32	42	42	6.13	
B0286	5.41	16	33	33	6.72	
E0552	5.26	20	23	23	6.72	
A0118	5.26	56	61	61	3.66	
B0227	5.25	16	26	26	7.37	
B0207	5.24	24	32	32	6.62	
A0064	5.20	20	37	37	6.03	
E0557	5.12	16	24	24	4.92	
B0267	5.12	24	39	39	6.00	
A0138	5.12	20	32	32	6.38	
D0452	4.95	48	51	51	5.14	
E0565	4.90	20	26	26	5.38	
A0107	4.85	20	26	26	4.58	
E0544	4.83	28	28	28	6.06	
A0116	4.82	48	58	58	3.11	
A0011	4.81	40	37	37	5.03	
E0549	4.75	12	27	27	5.90	
E0569	4.74	20	21	21	5.31	
A0111	4.74	28	27	27	5.45	
E0560	4.70	24	22	22	4.67	
E0568	4.68	12	15	15	5.31	
L0837	4.67	28	32	32	4.27	
Load variables to KG-type cryptographic equipment						

TE MEAN = 1.72; S.D. = 1.22; HIGH = 2.94

TABLE 41

AFSC 2E2X1 TASKS WITH HIGHEST TASK DIFFICULTY RATINGS

TASKS	TSK DIF	PERCENT MEMBERS PERFORMING								TNG EMP
		1-24 MOS TAFMS	1-48 MOS TAFMS	3- SKL LVL	5- SKL LVL	7- SKL LVL				
A0157	8.73	0	2	2	1	1	1.10			
A0156	8.13	0	3	3	2	3	1.64			
A0155	8.11	0	3	3	1	1	1.35			
Y1329	7.46	0	0	0	2	13	.91			
B0227	7.37	16	26	26	30	23	5.25			
Isolate LAN component malfunctions, such as routers, servers, or hubs										
S1197	7.22	0	2	2	1	2	.86			
Y1328	7.21	0	2	1	9	40	1.24			
S1198	7.18	0	4	3	4	5	1.22			
Y1331	7.05	0	3	4	13	40	1.30			
Establish organizational policies, such as operating instructions (OIs) or standard operating procedures (SOPs)										
W1257	7.03	4	2	3	3	11	.57			
E0555	6.95	8	16	11	21	19	4.31			
W1258	6.92	0	2	1	1	9	.78			
Determine specific source of personnel requirements for deployment manning documents										
E0556	6.91	16	19	15	24	21	4.35			
W1253	6.86	4	2	2	2	9	.73			
Coordinate deployment of personnel with other MAJCOMs or joint service commands										
Y1347	6.86	4	0	1	8	45	1.39			
B0251	6.85	0	7	7	6	5	1.76			
A0121	6.84	20	16	14	17	20	3.89			
A0126	6.84	24	15	17	19	29	2.14			
E0548	6.83	12	13	11	14	11	4.41			
B0224	6.83	4	10	12	10	12	2.38			
S1187	6.82	16	9	8	10	9	2.01			
Y1355	6.80	0	2	4	32	68	2.06			
W1256	6.80	0	1	1	1	11	.85			
Coordinate specific source of personnel requirements with appropriate agencies										

TD MEAN = 5.00; S.D. = 1.00; HIGH = 6.00

TABLE 42

EXAMPLES OF CTS ELEMENTS NOT SUPPORTED BY SURVEY DATA
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

UNIT	LEARNING OBJECTIVE	PERCENT MEMBERS PERFORMING				TNG	TSK	ATI
		1 ST	JOB (N=25)	ENL (N=257)	EMP*			
9.2.3.	Load firefly key							
Task	P1058. Load variables using firefly keys	16	12	12	1.80	4.76	7	
11.2.2.	Configure multiplexer for operation							
Task	O1017. Configure multiplexers	12	12	12	3.53	6.03	11	

* Mean TE Rating = 1.72 Standard Deviation = 1.22 High TE = 2.94

** Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00

TABLE 43

EXAMPLES OF TASKS NOT REFERENCED TO CTS ELEMENTS
WITH 20 PERCENT OR MORE MEMBERS PERFORMING

TASKS	TNG EMP*	1 ST JOB (N=25)	1 ST ENL (N=257)	TSK DIF**	ATI
D0452 Isolate malfunctions to cables	4.95	48	51	5.14	18
A0001 Analyze equipment outages or malfunction reports	4.14	36	47	5.37	12
A0138 Read, interpret, or maintain circuit diagrams	5.12	20	32	6.38	12
L0809 Isolate KG-94 series malfunctions	3.57	28	26	6.16	11
L0854 Operationally check KG-94 series equipment	3.41	28	27	4.52	11

* Mean TE Rating = 1.72 Standard Deviation = 1.22 High TE = 2.94

** Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00

TABLE 44

EXAMPLES OF POI OBJECTIVES NOT SUPPORTED BY SURVEY DATA
(LESS THAN 30 PERCENT MEMBERS PERFORMING)

UNIT	LEARNING OBJECTIVE	PERF CODE	PERCENT MEMBERS PERFORMING				TNG EMP	TSK DIF	ATI
			1 ST JOB (N=25)	1 ST ENL (N=257)	1 ST	1 ST			
VII.1.b.	Using KAM 529 and a fill device, load Firefly key into a TSEC/KG194	PC	16	12			1.80	4.76	7
Task	P1058. Load variables using firefly keys								
VIII.1.c.	Using an approved checklist, isolate a fault in the Norstar Switching System within 15 minutes	PC/W							
Tasks	B0246. Isolate switchboard malfunctions, other than tactical switchboards		4	2			1.98	6.10	7
	B0310. Isolate malfunctions to switchboards, other than tactical switchboards		12	4			2.27	5.89	7

* Mean TE Rating = 1.72 Standard Deviation = 1.22 High TE = 2.94

** Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00

TABLE 45

EXAMPLES OF TASKS NOT REFERENCED TO POI OBJECTIVES
WITH 30 PERCENT OR MORE MEMBERS PERFORMING

TASKS	TNG EMP*	1 ST JOB (N=25)	1 ST ENL (N=257)	TSK DIF**	ATI
A0027 Clean or lubricate equipment, other than IDFs	2.52	32	31	1.78	5
A0034 Connect or disconnect power, power panels, or equipment leads	3.98	52	52	2.81	13
A0053 Inspect cables for corrosion	3.16	48	53	2.05	13

* Mean TE Rating = 1.72 Standard Deviation = 1.22 High TE = 2.94

** Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00

TABLE 46

**JOB SATISFACTION INDICATORS FOR IDENTIFIED JOB GROUPS
(PERCENT MEMBERS RESPONDING)**

	MGMT CLUSTER (N=270) (STG 69)	GEN COMP NETWORK & PERI EQUIP CLUSTER (N=319) (STG 109)	JSS IJ (N=48) (STG 243)	COMPUTER SWITCH MAINT IJ (N=16) (STG 309)	AIRCRAFT COMPUTER MAINT IJ (N=30) (STG 402)	INTEL E&I IJ (N=13) (STG 474)
<u>EXPRESSED JOB INTEREST</u>						
INTERESTING	68	82	59	38	48	92
SO-SO	20	8	18	13	24	8
DULL	12	10	24	50	28	0
<u>PERCEIVED USE OF TALENTS</u>						
EXCELLENT TO PERFECT	19	29	6	0	8	31
FAIRLY WELL TO VERY WELL	60	60	59	63	60	54
NONE TO VERY LITTLE	21	12	35	38	32	15
<u>PERCEIVED USE OF TRAINING</u>						
EXCELLENT TO PERFECT	10	12	12	0	8	15
FAIRLY WELL TO VERY WELL	51	57	65	75	68	62
NONE TO VERY LITTLE	39	32	24	25	24	23
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>						
SATISFIED	64	77	71	25	56	85
NEUTRAL	12	9	12	25	24	0
DISSATISFIED	24	14	18	50	20	15
<u>REENLISTMENT INTENTIONS</u>						
YES OR PROBABLY YES	50	48	35	50	60	62
NO OR PROBABLY NO	9	32	53	50	40	31
WILL RETIRE	41	20	12	0	0	8
Totals may not equal 100 due to rounding						

TABLE 46 (CONTINUED)

JOB SATISFACTION INDICATORS FOR IDENTIFIED JOB GROUPS
(PERCENT MEMBERS RESPONDING)

	TACTICAL COMM TECH IJ (N=19) (STG 445)	TACTICAL SWITCH MAINT IJ (N=10) (STG 348)	CNSC IJ (N=365) (STG 338)	STRATCOM MAINT TECH IJ (N=18) (STG 412)	CRYPTO MAINT TECH IJ (N=58) (STG 249)	SECURE TELE SWITCH TECH IJ (N=10) (STG 387)
<u>EXPRESSED JOB INTEREST</u>						
INTERESTING	53	67	62	28	44	0
SO-SO	35	17	19	17	22	100
DULL	12	17	18	56	34	0
<u>PERCEIVED USE OF TALENTS</u>						
EXCELLENT TO PERFECT	0	0	13	11	14	0
FAIRLY WELL TO VERY WELL	76	100	67	50	44	0
NONE TO VERY LITTLE	24	0	19	39	42	100
<u>PERCEIVED USE OF TRAINING</u>						
EXCELLENT TO PERFECT	0	0	9	11	10	0
FAIRLY WELL TO VERY WELL	82	83	62	39	56	0
NONE TO VERY LITTLE	18	17	29	50	34	100
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>						
SATISFIED	71	83	59	28	52	0
NEUTRAL	12	17	13	11	20	100
DISSATISFIED	18	0	28	61	28	0
<u>REENLISTMENT INTENTIONS</u>						
YES OR PROBABLY YES	88	100	50	56	54	100
NO OR PROBABLY NO	6	0	22	44	42	0
WILL RETIRE	6	0	29	0	4	0
Totals may not equal 100 due to rounding						

TABLE 47

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 2E2X1 AND COMPARATIVE SAMPLE GROUP
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS' TAFMS		49-96 MONTHS' TAFMS		97+ MONTHS' TAFMS	
	2002 2E2X1 (N=257)	COMP SAMPLE (N=444)	2002 2E2X1 (N=198)	COMP SAMPLE (N=184)	2002 2E2X1 (N=600)	COMP SAMPLE (N=562)
<u>EXPRESSED JOB INTEREST</u>						
INTERESTING	51	62	51	65	71	71
SO-SO	23	19	24	18	15	16
DULL	26	18	25	16	14	12
<u>PERCEIVED USE OF TALENTS</u>						
EXCELLENT TO PERFECT	13	8	11	16	20	19
FAIRLY WELL TO VERY WELL	56	67	55	63	60	64
NONE TO VERY LITTLE	31	25	34	21	21	17
<u>PERCEIVED USE OF TRAINING</u>						
EXCELLENT TO PERFECT	7	11	10	17	10	15
FAIRLY WELL TO VERY WELL	60	67	51	60	55	62
NONE TO VERY LITTLE	33	22	39	22	35	23
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>						
SATISFIED	52	58	54	62	64	68
NEUTRAL	18	14	21	14	12	12
DISSATISFIED	30	28	25	24	24	20
<u>REENLISTMENT INTENTIONS</u>						
YES OR PROBABLY YES	42	37	61	59	53	56
NO OR PROBABLY NO	56	63	38	41	9	7
WILL RETIRE	2	1	1	1	38	36

▪ Comparative sample of only Communications-Electronics career ladders surveyed in the last 12 months - AFSCs 2E1X1 and 2E1X2

TABLE 48

JOB SATISFACTION INDICATORS FOR
AD, ANG, AND AFRC MEMBERS
(PERCENT MEMBERS RESPONDING)

	AD (N=1055)	ANG (N=499)	AFRC (N=82)
<u>EXPRESSED JOB INTEREST</u>			
INTERESTING	62	84	56
SO-SO	19	10	26
DULL	19	6	18
<u>PERCEIVED USE OF TALENTS</u>			
EXCELLENT TO PERFECT	16	15	7
FAIRLY WELL TO VERY WELL	58	73	61
NONE TO VERY LITTLE	26	12	32
<u>PERCEIVED USE OF TRAINING</u>			
EXCELLENT TO PERFECT	9	12	7
FAIRLY WELL TO VERY WELL	56	69	60
NONE TO VERY LITTLE	35	18	33
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>			
SATISFIED	59	75	56
NEUTRAL	15	13	17
DISSATISFIED	26	12	27

Totals may not equal 100 due to rounding

TABLE 49

**COMPARISON OF REENLISTMENT FACTORS BY TAFMS GROUPS –
PERCENT OF RESPONDENTS SELECTING EACH FACTOR AND
AVERAGE SCORE AMONG THOSE SELECTING EACH FACTOR**

31 FACTORS LISTED IN ORDER OF APPEARANCE IN SURVEY Scale: 1 = Slight Influence; 2 = Moderate Influence; 3 = Strong Influence	1-48 MONTHS' TAFMS (N=109)		49-96 MONTHS' TAFMS (N=121)		97+ MONTHS' TAFMS (N=319)	
	Percent Selecting	Average	Percent Selecting	Average	Percent Selecting	Average
MILITARY LIFESTYLE	52	2.21	57	2.30	50	2.28
PAY AND ALLOWANCES	54	2.25	51	2.40	49	2.33
BONUS OR SPECIAL PAY	62	2.43	47	2.49	21	2.34
RETIREMENT BENEFITS	45	2.51	55	2.50	75	2.69
MILITARY-RELATED EDU & TRNG OPPORTUNITIES	61	2.37	51	2.37	39	2.12
OFF-DUTY EDU OR TRAINING OPPORTUNITIES	57	2.56	51	2.42	37	2.25
MEDICAL/ DENTAL CARE FOR AD MEMBER	54	2.49	50	2.33	47	2.34
MEDICAL/ DENTAL CARE FOR FAMILY MEMBERS	44	2.46	42	2.59	48	2.47
BASE HOUSING	15	1.75	19	2.09	17	1.87
BASE SERVICES	22	1.67	15	2.00	19	1.93
CHILDCARE NEEDS	9	2.00	15	2.33	8	2.20
SPOUSE'S CAREER	8	2.56	11	2.46	10	2.35
CIVILIAN JOB OPPORTUNITIES	20	2.45	15	1.83	9	2.28
EQUAL EMPLOYMENT OPPORTUNITIES	6	2.43	10	2.08	5	2.06
NUMBER OF PCS MOVES	11	2.33	17	2.38	18	2.20
LOCATION OF PRESENT ASSIGNMENT	13	2.29	28	2.35	31	2.23
NUMBER/DURATION OF TDYS OR DEPLOYMENTS	15	2.25	22	2.11	19	2.15
WORK SCHEDULE	28	1.87	22	2.04	25	2.15
ADDITIONAL DUTIES	7	2.00	6	1.71	8	1.72
JOB SECURITY	66	2.67	63	2.71	61	2.56
ENLISTED EVALUATION SYSTEM	1	2.00	7	1.75	6	2.00
PROMOTION OPPORTUNITIES	34	2.27	29	2.40	27	2.34
TRAINING/EXPERIENCE OF UNIT PERSONNEL	14	2.00	14	1.88	13	2.10
UNIT MANNING	5	2.00	6	1.86	5	2.00
UNIT RESOURCES	3	1.67	2	2.67	3	1.90
UNIT READINESS	0	0	2	2.50	2	2.00
RECOGNITION OF EFFORTS	19	1.86	16	1.95	18	1.95
ESPRIT DE CORPS/MORALE	18	2.45	27	2.42	25	2.28
LEADERSHIP OF IMMEDIATE SUPERVISOR	17	2.28	17	2.29	16	2.19
LEADERSHIP AT UNIT LEVEL	14	2.13	12	1.93	14	1.96
SENIOR AIR FORCE LEADERSHIP	7	2.25	3	1.75	8	2.00

TOP 5 REASONS FOR MEMBERS REENLISTING BY TAFMS GROUP

1-48 MONTHS' TAFMS (N=109)	49-96 MONTHS' TAFMS (N=121)	97+ MONTHS' TAFMS (N=319)
JOB SECURITY	JOB SECURITY	RETIREMENT BENEFITS
BONUS OR SPECIAL PAY	MILITARY LIFESTYLE	JOB SECURITY
MILITARY-RELATED EDUCATION & TRAINING OPPORTUNITIES	RETIREMENT BENEFITS	MILITARY LIFESTYLE
OFF-DUTY EDUCATION OR TRAINING OPPORTUNITIES	OFF-DUTY EDUCATION OR TRAINING OPPORTUNITIES	PAY AND ALLOWANCES
MEDICAL OR DENTAL CARE FOR AD MEMBER	PAY AND ALLOWANCES	MEDICAL OR DENTAL CARE FOR FAMILY MEMBERS

TABLE 50

**COMPARISON OF SEPARATION FACTORS BY TAFMS GROUPS –
PERCENT OF RESPONDENTS SELECTING EACH FACTOR AND
AVERAGE SCORE AMONG THOSE SELECTING EACH FACTOR**

31 FACTORS LISTED IN ORDER OF APPEARANCE IN SURVEY Scale: 1 = Slight Influence; 2 = Moderate Influence; 3 = Strong Influence	1-48 MONTHS' TAFMS (N=144)		49-96 MONTHS' TAFMS (N=75)		97+ MONTHS' TAFMS (N=55)	
	Percent Selecting	Average	Percent Selecting	Average	Percent Selecting	Average
MILITARY LIFESTYLE	53	2.18	59	2.20	53	1.72
PAY AND ALLOWANCES	61	2.36	25	2.33	62	2.32
BONUS OR SPECIAL PAY	16	2.22	40	2.40	40	2.45
RETIREMENT BENEFITS	8	1.45	16	2.08	27	2.27
MILITARY-RELATED EDU & TRNG OPPORTUNITIES	9	2.18	23	2.35	24	2.15
OFF-DUTY EDU OR TRAINING OPPORTUNITIES	17	2.40	27	2.35	16	2.44
MEDICAL/ DENTAL CARE FOR AD MEMBER	8	2.00	17	2.23	29	2.12
MEDICAL/ DENTAL CARE FOR FAMILY MEMBERS	6	1.88	19	2.43	29	2.62
BASE HOUSING	12	1.94	19	2.14	22	2.33
BASE SERVICES	9	1.77	13	2.10	11	1.67
CHILDCARE NEEDS	6	2.44	12	2.56	13	2.57
SPOUSE'S CAREER	9	2.54	12	2.56	27	2.53
CIVILIAN JOB OPPORTUNITIES	41	2.47	51	2.66	53	2.69
EQUAL EMPLOYMENT OPPORTUNITIES	4	2.33	3	3.00	5	1.33
NUMBER OF PCS MOVES	14	2.25	21	2.62	33	2.33
LOCATION OF PRESENT ASSIGNMENT	37	2.37	27	2.40	27	2.53
NUMBER/DURATION OF TDYS OR DEPLOYMENTS	23	2.48	28	2.76	38	2.48
WORK SCHEDULE	18	2.27	20	2.33	13	1.57
ADDITIONAL DUTIES	17	1.92	25	1.95	24	2.23
JOB SECURITY	6	1.67	4	2.00	5	1.00
ENLISTED EVALUATION SYSTEM	15	2.29	27	2.60	24	2.23
PROMOTION OPPORTUNITIES	20	2.10	20	2.20	23	2.44
TRAINING/EXPERIENCE OF UNIT PERSONNEL	26	2.00	24	2.17	25	2.29
UNIT MANNING	26	2.18	28	2.14	29	2.12
UNIT RESOURCES	17	2.33	16	1.58	27	2.00
UNIT READINESS	4	2.33	3	2.00	16	2.22
RECOGNITION OF EFFORTS	46	2.38	48	2.06	40	2.18
ESPRIT DE CORPS/MORALE	36	2.65	39	2.14	25	2.21
LEADERSHIP OF IMMEDIATE SUPERVISOR	22	2.61	25	2.47	22	2.08
LEADERSHIP AT UNIT LEVEL	23	2.24	37	2.50	27	2.53
SENIOR AIR FORCE LEADERSHIP	15	2.50	15	2.27	27	2.07

TOP 5 REASONS FOR MEMBERS SEPARATING BY TAFMS GROUP

1-48 MONTHS' TAFMS (N=144)	49-96 MONTHS' TAFMS (N=75)	97+ MONTHS' TAFMS (N=55)
PAY AND ALLOWANCES	MILITARY LIFESTYLE	PAY AND ALLOWANCES
MILITARY LIFESTYLE	CIVILIAN JOB OPPORTUNITIES	CIVILIAN JOB OPPORTUNITIES
RECOGNITION OF EFFORTS	RECOGNITION OF EFFORTS	MILITARY LIFESTYLE
CIVILIAN JOB OPPORTUNITIES	BONUS OR SPECIAL PAY	BONUS OR SPECIAL PAY
LOCATION OF PRESENT ASSIGNMENT	ESPRIT DE CORPS/MORALE	RECOGNITION OF EFFORTS